

vision



standards



preparation



2008

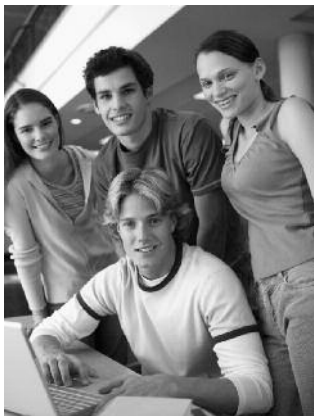


**NJ STEPS
RE-DESIGNING EDUCATION IN NEW JERSEY
FOR THE 21ST CENTURY**

A Policy Report of the New Jersey High School Redesign Steering Committee

April 25, 2008

CONTENTS



Vision for Public Education in New Jersey	3
Executive Summary	4
Recommendation 1: Standards and High School Graduation Requirements	16
Recommendation 2: Assessment Alignment	26
Recommendation 3: Teachers and School Leaders	29
Recommendation 4: School Redesign—Learning Communities and Personalized Education	31
Recommendation 5: P-16 Alignment	35
Appendices	
A. A View of High Schools in New Jersey	37
B. The American Diploma Project (ADP) in New Jersey	44
C. New Jersey’s Secondary Education Initiatives	46
D. Systemic Support Initiative For Secondary Education Reform	48
E. Steering Committee Outreach.....	50
F. 2005 High School Graduation Survey	53
G. Glossary of Terms	56
H. Bibliography	58
Acknowledgements	60

VISION FOR PUBLIC EDUCATION IN NEW JERSEY



Co-Chairs:

Jon S. Corzine

Governor
The State of New Jersey

Arthur Ryan

Chairman
Prudential

Dr. Susan Cole

President
Montclair State University

New Jersey will educate all students to prepare them to lead productive, fulfilling lives. Through a public education system that is seamlessly aligned from pre-school to college, students will gain the requisite academic knowledge and technical and critical thinking skills for life and work in the 21st century.

EXECUTIVE SUMMARY

In February 2005, Achieve, Inc. and The National Governors Association convened CEOs and education leaders in Washington, D.C. for the National Education Summit on High Schools. These leaders gathered to discuss and vote on an action agenda to raise high school expectations and outcomes for students.

The Summit succeeded in raising awareness about the critical need to increase the effectiveness, relevance, and alignment of the nation's high schools. It also created a shared national action agenda for high school reform. New Jersey signed on to the action agenda and became one of the first 13 states to join Achieve's American Diploma Project Network (ADP Network). ADP Network member states have pledged to make the policy, legislative, and programmatic changes necessary to help all students graduate from high school ready for work or for further education.

Following the National Education Summit on High Schools, New Jersey Governor Richard Codey, Prudential Chairman Arthur Ryan, and Montclair State University President Dr. Susan Cole made a commitment to support New Jersey's efforts to meet the ADP Network goals, and invited other education and business leaders to join them. This group organized the New Jersey Education Summit on High Schools that took place in September 2005.

State Summit participants, like those at the National Summit, created a shared action agenda for NJ's high school improvement efforts. After the Summit, the organizing committee submitted the recommendations created at the Summit to incoming New Jersey Governor Jon Corzine and his leadership team. The organizing committee also expanded to include a broader representation of education leaders.

At a press conference at the Statehouse, in August 2006, Governor Corzine, Art Ryan, Dr. Susan Cole and Dr. Kenneth Ender, president, Cumberland County College announced a unified effort between business and education to work on high school redesign in the state. The New Jersey High School Redesign Steering Committee was formed and charged with further developing recommendations resulting from the State Summit for improving New Jersey's public high schools.

The Steering Committee's work included collecting feedback and input from New Jersey educators and the general public through meetings across the state. Focused meetings were also held with key stakeholder groups and an advisory committee was formed to provide input on recommendations. In addition, the Steering Committee consulted with representatives from other states, reviewed research, and participated in a number of conferences to collect information on best practices. This document is the result of this multi-year process.

New Jersey public schools have a notable record of success. New Jersey has the largest percentage of three and four year olds enrolled in high quality preschool—helping students begin their educational journey with a good foundation.¹ The state's fourth and eighth grade students are showing improved achievement on state tests. They scored in the top two states in reading and top five in math on the 2007 National Assessment for Educational Progress (NAEP).² New Jersey eighth graders also scored the best in the nation on the recent NAEP in writing for their grade level.

At the high school level, New Jersey ranks first in the nation in the number of schools offering Advanced Placement courses.³ New Jersey students also score among the highest in the nation on Advanced Placement (AP) exams.⁴ In addition, the state has one of the top high school graduation rates in the nation.⁵ With such positive results, New Jersey is providing a strong academic foundation for many students.

Although these data indicate that New Jersey's system of education is serving students well in the aggregate, when these statistics are parsed, it is apparent that there is room to increase the level of academic success for many students. A number of students don't graduate from high school and many who do are under-prepared for apprenticeships, college, and the workforce.

The Case For High School Reform

What do today's young people need to know to be successful in the trades, work, or further education after high school? Years ago, that question would be answered by students' plans after high school. Today, an unprecedented convergence has occurred among the necessary knowledge and skills required for student success in higher education or the workforce.

Extensive research conducted by Achieve, Inc. and others has revealed that students need the same knowledge and skills—no matter what their plans are after graduation. Students, whether they choose to pursue an apprenticeship, two-year college, four-year college, or entry-level employment will need to be prepared to the same standard.

Part of the reason for this remarkable convergence of required skills is that the world is changing. In fact, the world is changing so quickly that most of the jobs today's children will take when they grow up have not yet been invented—and many of the entry-level jobs that still only require a high school diploma will be gone.

Nationally, new jobs will increasingly require at least some postsecondary education. Only one tenth of these new jobs will represent an opportunity for high school dropouts and less than one quarter will be open to those who hold only a high school diploma. The remaining jobs will require the knowledge and skills of workers prepared with some postsecondary education or a bachelor's degree.⁶

With this reality in mind, New Jersey began to look at the high school experience within the state. This examination revealed a strong tension between two very important goals. The first goal is to prepare high school graduates for a world marked by rapid change and escalating thresholds for success. The second goal is to create a process that would allow schools and districts sufficient time to deliver the education that would prepare students at all levels for these higher expectations.

The Committee's recommendations recognize the urgency of preparing every student for success while considering the many challenges of implementation. The Committee agreed that incremental steps toward implementation would make teaching and learning goals achievable. At the same time, the Committee is dedicated to creating a high school experience that ensures New Jersey's students receive the education they need to be prepared for work, education, and citizenship.

The New Jersey High School Redesign Steering Committee proposes the following recommendations. These steps will help ensure that New Jersey students graduate from high school with the foundational knowledge and skills to succeed in the 21st century. Recommendations include aspects of the American Diploma Project, The Partnership for 21st Century Skills, High Schools That Work, The Secondary Education Initiative, which includes rigorous courses and personalized educational experiences, and other successful secondary reforms in New Jersey.

Particular consideration was given to the feedback received from the public and the education community. (See Appendix E.) This dialogue helped to clarify the vision and was central in the formulation of the recommendations and actions outlined below.

Recommendations

- 1. Standards and High School Graduation Requirements: Align New Jersey high school standards and graduation requirements to college and workforce entry requirements.**

According to reviews by Achieve Inc., New Jersey's high school standards and graduation requirements

“No matter what our high school students plan to do after their graduation, we have a moral obligation and vested economic interest in equipping students with the tools to build successful lives.”

Governor Jon Corzine

in language arts literacy and mathematics did not specifically reflect the knowledge and skills necessary for success in credit-bearing coursework in higher education or entry-level, well-paying jobs. Currently, New Jersey does not require all students to complete a college and work-ready curriculum to graduate from high school. Local graduation requirements also vary widely.

New Jersey's higher education and business communities have endorsed the ADP Network benchmarks for language arts literacy and mathematics as the requirements for success in either area.

Next Steps:

The New Jersey Department of Education must:

- Implement the aligned language arts literacy and mathematics standards that support student achievement of the ADP benchmarks in language arts literacy and mathematics that were recently adopted by the State Board of Education.
- Review and revise the New Jersey Department of Education's standards and assessment code.
- Review and revise all Core Curriculum Content Standards in 2009 to ensure that the standards in science, social studies, the visual and performing arts, career education and consumer, family, and life skills, world languages, health and physical education, and technology reflect the breadth of 21st century skills and knowledge that students require to be successful in college and the workplace.
- Conduct regular reviews of the standards to ensure that they are aligned to the demands of higher education and the workforce and are internationally competitive.
- Phase in the NJ STEPS graduation requirements for all students.
- Help local school districts align curriculum across the full P-12 spectrum.
- Move to quickly adopt the national standard for high school graduation rate calculation.
- Ensure special education students continue to be guided by their Individualized Education Plans (IEPs).

2. **Assessment Alignment: Implement an efficient and effective assessment system that measures student achievement, provides data to address student learning and performance gaps, and is aligned with the expectations of higher education and the workplace.**

The intention of redesigning New Jersey's assessment system is to make the system an efficient and effective way to measure how well students are meeting the standards. An efficient and effective assessment system will:

- Align high school graduation assessments with expectations of higher education and the workforce and vertically align assessments in earlier grades with these end goals.
- Set performance indicators that accurately measure student progress.
- Include a data and analytic system so educators can utilize data to assist in decision-making.
- Incorporate rigorous alternative assessment protocols for students.
- Track individual student progress and predict readiness.
- Identify successful practices and areas for improvement.

Next Steps:

The New Jersey Department of Education must:

- Replace the High School Proficiency Assessment (HSPA) with a series of end of course assessments in math and science, and a proficiency exam in language arts literacy that are aligned with the expectations of higher education and the workplace.

- Allow school districts to voluntarily participate in the Algebra II end of course assessment as it becomes more widely available.
- Submit the language arts literacy proficiency assessment for review for use as a placement exam for New Jersey colleges and universities.
- Develop and implement a rigorous alternative assessment method to measure workplace and college readiness.
- Add a performance-based assessment method to create a fuller picture of student capabilities.
- Work with the New Jersey Commission on Higher Education and the Department of Labor to align the NJ SMART data system with the state's Student Unit Record (SURE) system for higher education and the workforce.

3. Teachers and School Leaders: Recruit, support, and retain highly effective teachers and school leaders, with particular attention to high need schools and high need subject areas, to ensure all high school students graduate ready for college and work.

Students will only be able to learn the foundational knowledge and skills necessary for success in higher education and the workforce if teachers and school leaders are provided support for and prepared to teach to the higher standards.

New Jersey must attract and support the best and the brightest to the teaching profession and to positions of school leadership. In this regard, New Jersey's schools must design and offer sustained, intensive, job-embedded professional development to enable teachers, superintendents, principals, and supervisors to support high student achievement. School leaders will also need preparation and support to meet the challenges of their ever-evolving roles.

Next Steps:

The New Jersey Department of Education and state education associations must:

- Strengthen educator recruitment and retention in the state by creating a partnership with key stakeholders to increase awareness of the teaching profession and to also research, identify, and implement appropriate recruitment initiatives for teachers and education leaders.
- Evaluate and improve the efficacy of traditional teacher preparation programs. Examine the pathways of entry into the education profession and ensure that there is a seamless process for individuals to enter the field to help fill teaching vacancies in high-need subjects. Investigate ways to improve the teaching profession at the college level.
- Develop infrastructure and mechanisms to provide increased technical assistance to local education leaders.
- Evaluate models of professional development for teachers and school leaders and help districts implement successful efforts.

4. School Redesign—Learning Communities and Personalized Education: Redesign high schools as learning communities that utilize personalized learning approaches to prepare and support students in meeting the new standards and graduation requirements.

High schools were designed in the 19th century. Their mission was to prepare the majority of students to go directly into a predominantly industrial workforce. This model, largely still in effect, does not reflect

the requirements for individual success in the 21st century. The reality is that all students, regardless of their future plans, need to take a rigorous series of courses in order to be prepared for the complex world into which they will graduate. And many students will require more individualized attention, more relevant course work, or restructured learning experiences to help them meet higher expectations.

To achieve this, the New Jersey Department of Education should commit to providing local school districts with support, flexibility, and resources in this effort. Special consideration will be given to schools and students that are struggling to meet current standards and high school graduation requirements. The needs of gifted and talented students will also be considered.

Next Steps:

The New Jersey Department of Education must:

- Measure the success of new high school models and provide opportunities for districts and schools to learn about models and best practices.
- Develop infrastructure and mechanisms to provide increased technical assistance to local education leaders.
- Sustain and enhance current efforts to help teachers and school leaders prepare for and implement programs that utilize data to improve student achievement.
- Work with partners to communicate information on proven successful practices in reform currently being implemented in high schools throughout the nation.
- Work with local school districts to evaluate and implement models of personalized learning strategies for all students.
- Work with local districts to support Individualized Education Plans (IEPs) for special education students.
- Expand the use of the 12th grade option.
- Identify federal, private, and foundation funding sources to help construct and renovate science, technology, engineering, and mathematics (STEM) facilities as well as obtain technology that will enable virtual methods of teaching STEM.

The state and local school districts must also look to reallocate available resources to make middle and high school redesign a priority. The state is committed to pursuing grant funding through federal, corporate, and private sources to provide additional resources to support the implementation of these recommendations. In addition, each partner organization represented on the High School Redesign Steering Committee will work to support implementation at the local school district level.

5. P-16 Alignment: Establish a council composed of a diverse group of key stakeholders to create a seamless, aligned system of public education in New Jersey.

The New Jersey High School Redesign Steering Committee realizes that increasing student achievement at the high school level begins in pre-school and builds at every level thereafter. This preparation can be accomplished only through a clear and consistent alignment of the educational system from pre-school through four years of college (P-16). Aligning the education system will:

- Ease the transition from middle school to high school and to college.
- Help observe student progress at all levels from pre-school to college.
- Ensure that all students have every opportunity to achieve at high levels and on grade level.
- Monitor student achievement and implement interventions to decrease the high school dropout rate.
- Decrease the number of students needing remediation in college.
- Increase the college completion rate.
- Ensure that New Jersey remains competitive both nationally and internationally by creating a workforce that is prepared for high skilled jobs and lifelong learning.

In order for New Jersey to accomplish this vision, a council must be formed to focus on the challenges of aligning and improving the state's education system. This council should have a commitment to long-term improvements in student achievement that support a high quality of life in the state, include representation from key stakeholder groups, and focus on those issues that cover multiple parts of the educational continuum. Its mission will support the State Board of Education and the Commission on Higher Education. The P-16 Council will ensure programmatic and policy continuity between gubernatorial administrations.

Next Steps:

Using models developed by other successful states, the Steering Committee recommends that state leadership should collaborate to:

- Create a diverse P-16 council composed of leaders from education, business, industry, government, and other key areas.
- Establish a scope of work that focuses on increasing student achievement in order to preserve a high quality of life in the state by:
 - o Continuing to evaluate standards, graduation requirements, and assessments in light of college and workplace expectations.
 - o Building consensus for and awareness of educational alignment.
 - o Monitoring the progress of the educational system, holding responsible parties accountable for appropriate outcomes.
- Consider options for providing greater flexibility to schools by evaluating structural requirements such as seat-time and Carnegie units that may limit school's flexibility in helping students meet the standards.
- Align higher education and K-12 data systems.

Observations

These recommendations comprise an ambitious plan. By setting a higher bar for the outcomes of high school, the Committee has proposed a fundamental change in public education in the state that will affect students in all grades.

This proposal is being made after much deliberation and is based on research and consultation with many individuals who have a great desire to see all New Jersey students succeed. "Succeed" is an important word. The plan does not consider obtaining a job or embarking upon further education a sufficiently high target for the state's students. Rather, this document sets a threshold of giving students the knowledge and experiences they will need to move beyond an entry level job, to complete a trades apprenticeship, or to finish their degree.

Not all education and community leaders we have consulted agree with the suggested revisions. Irrespective of whether they endorse aspects of this plan, they have given us a consistent message: It is a great vision, but implementation will create challenges for students, for educators, for local districts, and for the New Jersey Department of Education.

The core belief that all students can learn is critical to the success of this plan. For some students, however, even the early phases of the NJ STEPS implementation will be difficult. The extra supports required by these students, including plans for early identification and intervention, must be front and center of any efforts to raise expectations.

More rigorous courses, particularly in the areas of science and math, will test the capacity of New

Jersey's teaching corps. The state, like many others, is already confronting a shortage of faculty in these areas. And current teachers are not always afforded the opportunity for the type of professional development this proposal would require. Recommendations to address this issue are included in this paper. But they should be undertaken within the context of a systematic review of teacher preparation and professional development in the state. Similar studies and recommendations have emerged from high school reform work in states like Ohio.

Perhaps the most controversial recommendation in this paper is the phased-in graduation requirement of Algebra II for all students. Some have cautioned against this mandate. Arguments have questioned the need for all students to study the subject, have asserted that it would be too difficult for many students, and have pointed to the difficulty of finding highly qualified teachers for the course.

These concerns are persuasive. But they are not as compelling as the data that indicate how important Algebra II is for lifelong learning. A growing body of research has recognized the crucial link between the study of advanced math in high school and success in college and work. In fact, many colleges and universities in New Jersey and across the nation require the completion of Algebra II for entry. Algebra II skills are also required for entry in some apprenticeship programs in the state.

The Algebra II requirement includes two sections, the core and the optional. The core section includes content that all students will need to learn and which will be assessed on the Algebra II end of course assessment. The optional section could be included in courses that prepare students for more advanced mathematics classes in high school such as pre-calculus and trigonometry.

A crosswalk study between the licensing requirements, assessments of career and technical fields, the Algebra II core content and end of course assessment will be undertaken by the New Jersey Department of Education. The study may uncover ways that will allow Career and Technical Education students the option of learning Algebra II content within the context of their required coursework. It may also allow educators opportunities to use the real world applications in Career and Technical Education to make Algebra II more compelling to students in traditional college prep courses.

Moving to Implementation

The New Jersey Department of Education has already begun initiatives focused on helping districts implement this plan. These include creating greater coordination between the Abbott high school reform initiatives and other high school efforts underway in the state, establishing a professional development collaborative to support schools in key areas of reform, (see Appendix D) and ongoing participation in joint assessment development with other states that are members of the ADP Network.

The adoption of these recommendations will also allow New Jersey to participate in a new Institute supported by the Gates Foundation. The Institute will be supported by organizations such as Achieve, Jobs for the Future, the Data Quality Campaign, and the National Governors Association. Its mission will be to help states actively involved in statewide high school reform. Collectively, the states would identify and resolve issues related to reform implementation. The Institute is expected to start its efforts in September.

On a district level, many have asked about additional funding for implementation. New Jersey's new funding formula already represents the highest per student spending in the nation. Approximately \$7.8 billion will be distributed for K-12 education for the 2009 fiscal year, an increase of approximately \$530 million. This new formula will provide greater opportunities for P-16 alignment across the state.



With strained local and state budgets, any additional resources will have to be found through strategic reallocations. There are some models for this kind of reorganization throughout the state in districts that have already adopted this curriculum for all students. Implementation on a large scale throughout the state will require a survey of national models, focusing on those that have proven to be successful.

The Steering Committee's mission was to recommend those education policy revisions required to ensure that all students graduate from high school prepared for work, further education, and citizenship. However, the final policy recommendation focuses on the practical challenges posed by this goal. The P-16 Coalition will need to mobilize quickly to address the issues raised here and elsewhere in the paper.

In recommending the creation of a P-16 Coalition, the Committee recognizes the need to continue to involve a broad collaborative of education stakeholders in a thoughtful process to address tough educational issues. Partnerships of this nature offer the best way to surface creative approaches and to resolve conflict, as our own work has revealed.

Many states across the nation have already implemented rigorous high school graduation requirements. We are encouraged by the progress currently underway in this state. Many school districts in New Jersey already require students to take higher-level courses such as Algebra II and Physics to graduate. By the fall of 2008, state regulations will require all high schools to provide students with a college preparatory curriculum that includes Algebra I and Biology. There are lessons to be learned from each of these efforts.

The challenges ahead for students in the 21st century are great. Students will embark upon a future that may include multiple career changes and further learning. This plan outlines what all students need to know upon completion of high school so that they have an array of paths toward success after graduation.

Only by seamlessly aligning a system that focuses on preparing students for lifelong learning will we ensure that they succeed. Our state's future depends on how capably we partner to make this happen.



**The New Jersey High School
Redesign Steering Committee**

THE CASE FOR HIGH SCHOOL REFORM

“In such an age, the greatest survival skill you can have is the ability to learn how to learn.”

Thomas L. Friedman

Today’s students need to be prepared for an adult world that we can only begin to envision. Many of them will earn livings in jobs that have not yet been invented in fields that don’t yet exist. Their activities of daily living will be influenced by rapidly changing technologies. They will wrestle with increasingly complex social issues. And they will live in a world with dissolving geographic boundaries.

Despite this, our children are still being graduated from an education system driven by models developed during and for an industrialized society. Although New Jersey has a record of success for many students, more needs to be done to ensure that all students become lifelong learners.

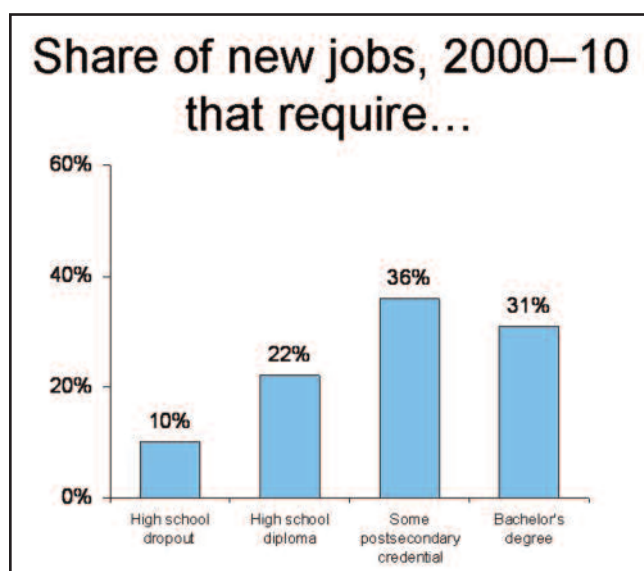


Chart: Source 12

A growing body of research has attempted to identify the end goal of a public education system that must prepare students for a “brave new world.” Because success will demand that adults continue to learn throughout their lifetimes, these studies have determined that an unprecedented convergence has occurred between the skills a student needs to enter the workforce upon graduation or pursue further education. Today, every student, regardless of his or her future plans, will need to pursue a rigorous course of study in high school in order to be successful after graduation.

Today’s high schools are actually exceeding their historic missions. They were originally designed to graduate 20 percent of students ready for college and 80 percent ready for the workforce. Nationally, 34 percent of high school graduates are prepared for college-level classes in English, math, reading, and science, according to a recent college readiness report.⁷ In New Jersey, the percentage is somewhat higher.

Regrettably, this accomplishment doesn’t align with the percentage of students who will be undertaking post secondary studies. Nationwide, 57 percent of all students enroll in postsecondary programs immediately out of high school.⁸ In New Jersey, more than 60 percent of students immediately enroll in college.⁹ The net result: Students are leaving high school underprepared for collegiate level work, requiring them to take noncredit bearing remedial courses. And taking even one remedial course makes it six times less likely that a student will graduate with a degree.¹⁰

“Years ago, a strong back and a willing heart were enough to allow a person to make a decent living. Today, a person’s ability to use his brain will determine his success. We do not want to see a drop in standard of living for our children; without a good education, they will live in a much different world, but one that is not necessarily better.”

Arthur F. Ryan
Chairman
Prudential

Too few high school graduates earn a college degree

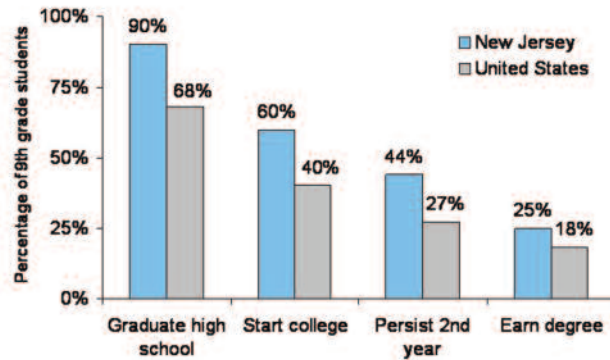


Chart: Source 13

The increasing demands of the workforce are creating a similar mismatch between graduate attainment and the skills and knowledge required to succeed. Several national studies have identified employer concerns with high school graduate preparation. Locally, in a survey of 100 diverse companies undertaken by the New Jersey Chamber of Commerce, 99 employers noted a difference between what their positions required of high school graduates and what those graduates were prepared to do.¹¹

It is time to take the steps necessary to match the high school experience with the expectations of the world into which students will graduate. This will be challenging in a diverse state like New Jersey. But the strong – and improving – record of student achievement in this state indicates that it is eminently possible.

What is required is a plan developed by and actively supported by a broad consensus of education stakeholders – a plan like New Jersey STEPS. This plan considers the urgency of improving New Jersey’s high schools in light of the implementation challenges that must be overcome in order to change. This plan outlines steps to ensure that students and educators have the resources and flexibility to succeed.

New Jersey – a state dependent on a highly educated workforce – cannot afford to ignore the educational progress of even one child.

Movement Based on Collaboration

In February 2005, Achieve, Inc. and The National Governors Association convened CEOs and education leaders in Washington, D.C. for the National Education Summit on High Schools. These leaders gathered to discuss and vote on an action agenda to raise high school expectations and outcomes for students.

The Summit succeeded in raising awareness about the urgent need to increase the effectiveness, relevance, and alignment of the nation’s high schools. New Jersey signed on to the action agenda and became one of the first 13 states to join Achieve’s American Diploma Project (ADP) Network. ADP Network member states have pledged to make the policy, legislative, and programmatic changes

necessary to help all students graduate from high school ready for work or for further education. The National Summit provided a shared agenda from which to begin the urgent work of high school reform.

Following the National Education Summit on High Schools, New Jersey Governor Richard Codey, Prudential Chairman Arthur Ryan, and Montclair State University President Dr. Susan Cole made a commitment to support New Jersey's efforts to meet the ADP Network goals, and invited other education and business leaders to join them. This group organized the New Jersey Education Summit on High Schools that took place in September 2005.

Approximately 60 education, business, nonprofit, and government leaders including those already involved in high school reform in the state met to begin to create a shared action plan for high school reform in New Jersey. During the first half of the Summit, national experts, Gene Bottoms of the Southern Regional Education Board, Michael Cohen of Achieve Inc., and Stefanie Sanford of The Gates Foundation discussed the need for and successful approaches to high school reform. In the afternoon, Summit participants met in small groups to begin to outline an action plan in four issue areas: standards, assessments, high quality teaching and learning and high school redesign.

At the end of the meeting, State Summit participants, like those at the National Summit, had created a shared action agenda for New Jersey's high school improvement efforts. After the New Jersey Education Summit on High Schools, the organizing committee submitted the recommendations created at the Summit to incoming New Jersey Governor Jon Corzine and his leadership team. The organizing committee also expanded to include a broader representation of education leaders.

Following the Summit at a press conference in August 2006, Governor Corzine, Art Ryan, Dr. Susan Cole and Dr. Kenneth Ender, president, Cumberland County College announced a unified effort between business and education to work on high school redesign in the state. The New Jersey High School Redesign Steering Committee was formed and charged with further developing recommendations resulting from the State Summit for improving New Jersey's public high schools.

The Steering Committee's work included collecting feedback and input from New Jersey educators and the general public through meetings across the state in 2006 and 2007. Focused meetings were also held with key stakeholder groups. An advisory committee also provided input on recommendations. In addition, the Steering Committee consulted with representatives from other states, reviewed research, and participated in a number of conferences to collect information on best practices. This document is the result of a multi-year process.

The American Diploma Project (ADP) in New Jersey

New Jersey Governor Jon Corzine, members of the President's Council, and the New Jersey Chamber of Commerce announced their endorsement of the ADP Network benchmarks developed by Achieve, Inc. The research and recommendations underlying ADP benchmarks have become the foundation for change and redesign of high schools in New Jersey.

Achieve is a national organization created by the nation's governors and business leaders to help states raise academic standards and achievement so that all students graduate ready for college, work, and citizenship. Achieve, in consultation with colleges, universities, and high-performance workplaces across the country, identified what students need to know and be able to do to be successful in the 21st century, and created the ADP Network benchmarks based on their findings.

New Jersey is one of 32 states that is a member of the ADP Network. These 32 states have volunteered to pursue an ambitious agenda – beginning with the development of a comprehensive action plan – to achieve the ADP Network goals, which include a commitment to implement the following policies:

- Align high school standards with college and workplace expectations.
- Align high school graduation requirements with college and workplace expectations in all Core Curriculum Content Standards areas.
- Align high school assessments to college and workplace expectations.
- Use high school tests for college placement.
- Develop a P-16 longitudinal data system.
- Hold high schools accountable for graduating students college and work ready.

Although New Jersey has taken up the charge to redesign its high schools, the Committee realizes that change does not happen overnight. The NJ STEPS plan provides a framework for redesigning high schools over time to enable educators, students, and schools to prepare for success.

New Jersey began to look at the high school experience within the state in light of the changing world and the ADP Network goals. This examination revealed a strong tension between two very important goals. The first goal is to prepare high school graduates for a world marked by rapid change and escalating thresholds for success. The second goal is to create a process that would allow schools and districts sufficient time to deliver the education that would prepare students at all levels for these higher expectations.

The Committee's recommendations recognize the urgency of preparing every student for success while considering the many challenges of implementation. The Steering Committee agreed that incremental steps toward implementation would make teaching and learning goals achievable. At the same time, the Steering Committee is dedicated to creating a high school experience that ensures New Jersey's students receive the education they need to be prepared for work, education and citizenship.

The New Jersey High School Redesign Steering Committee proposes the following recommendations as steps to help ensure that New Jersey students have greater academic rigor, flexibility, and information to graduate from high school with the foundational knowledge and skills to succeed in the 21st century. These recommendations include aspects of the American Diploma Project, The Partnership for 21st Century Skills, and build upon secondary education initiatives currently underway in New Jersey.

Particular consideration was given to the feedback received from the public and the education community. (See Appendix E.) This feedback helped to clarify the vision and was central in the formulation of the recommendations and actions outlined in this paper.

According to Achieve, 17 of the current 32 ADP Network states have already developed and finalized action plans for ensuring that today's high school graduates have the college and work-ready skills necessary to ensure their success.¹⁴ New Jersey's plans are outlined in this document.

RECOMMENDATION #1:

STANDARDS AND HIGH SCHOOL GRADUATION REQUIREMENTS

Align New Jersey high school standards and graduation requirements to college and workforce entry requirements.

At the core of the New Jersey High School Redesign Steering Committee's vision is the attainment of rigorous levels of achievement and graduation requirements for all students. This view has been influenced by the American Diploma Project (ADP) Network study "Ready or Not" and its recommended benchmarks along with subsequent research. New Jersey's higher education and business communities have endorsed the ADP benchmarks as the entry requirements for success.

According to reviews by Achieve Inc. in 2006, New Jersey's high school standards and graduation requirements in language arts literacy and mathematics did not specifically reflect the knowledge and skills necessary for success in credit-bearing coursework in higher education or entry-level, well-paying jobs.

Language arts literacy and mathematics are considered the foundational subjects on which the attainment of other knowledge strongly depends. Currently, New Jersey also does not require all students to complete a college and work-ready curriculum to graduate from high school. Local graduation requirements also vary widely.

In a first stage of raising student achievement, The State Board of education adopted new language arts literacy and mathematics standards on January 9, 2008. According to a review by Achieve, they are aligned to the expectations of higher education and the workforce. In the next phase of this work, the NJ Core Curriculum Content Standards in science, social studies, the visual and performing arts, career education and consumer, family, and life skills, world languages, health and physical education, and technology will be reviewed to reflect the foundational knowledge that students need.

Following adoption of the standards are proposed revisions to state requirements for high school graduation. The proposed graduation requirements, described as New Jersey STEPS, are more specific than the current ones. NJ STEPS mandates and encourages more rigorous content in areas that have been proven to prepare students for success in the workplace and to enter credit-bearing coursework in college. Increasing specificity is critical to ensuring greater consistency across the state.

Many districts across the state have also been voluntarily moving toward adopting higher standards and graduation requirements. ADP prescribes a specific sequence of courses. The recommendation below is a phased step toward those standards.

In recommending these enhanced graduation requirements, the Steering Committee recognizes that innovative flexible approaches must be identified to effectively implement the standards and graduation requirements across the state. Flexibility will allow for content to be taught in different ways, but with the same outcomes whether in a career and technical or comprehensive high school setting. For example, pre-engineering career and technical education programs can incorporate higher-level math and science content that would meet the increased graduation requirements. Special education students will continue to be guided by their Individualized Education Plans (IEPs).

Some students may need more than one year to master required content, while others may complete the requirements early. Flexibility in the NJ STEPS Graduation Requirements could also allow for students to choose a concentration or focus from a menu such as career and technical education programs, science, English, math, music, or art.

The proposed enhanced high school graduation requirements do not require the addition of more classes to the school day or a narrowing of the curriculum. The enhanced graduation requirements provide more specificity and greater guidance to help students graduate with the foundational knowledge and skills needed for success in higher education and the workplace.

Graduation Requirements Key

The Class of 2011
is currently in the 9th grade.

The Class of 2012
is currently in the 8th grade.

The Class of 2014
is currently in the 6th grade.

The Class of 2016
is currently in the 4th grade.

NJ STEPS Proposed Graduation Requirements

Subject	Current Regulations	Proposed Requirements	Assessments	P-16 Alignment
Language Arts Literacy	4 years Aligned with the Core Curriculum Content Standards	4 years •English I, English II, English III, English IV •Rigorous content which includes language, communication, writing, research, logic, technical and business reading and writing, informational text, media, and literature.	•A new Language Arts Literacy assessment, aligned to revised standards, will be required for the class of 2011 in grade 11, effective in the 2009-2010 school year.	•4 years required at a majority of New Jersey colleges and universities.
Math	3 years Aligned with the Core Curriculum Content Standards	3 years •Rigorous content that incorporates the equivalent of Algebra I, Geometry, and Algebra II will be phased in. •Algebra I, or the integrated equivalent will be required for the graduating class of 2012 along with two additional years of math. •Algebra I, Geometry, and a third year of rigorous math such as Algebra II, Statistics/Probability, Trigonometry, or an equivalent integrated math course will be required for the graduating class of 2014. •Algebra I, Geometry, and Algebra II, or the integrated equivalent, will be required for the graduating class of 2016. •A fourth year of rigorous math should be required by local boards of education.	•End of Course Algebra I assessment will replace HSPA Math as a requirement beginning with the graduating class of 2012, effective in the 2008-2009 school year. •End of Course Geometry assessment will be required, beginning with the graduating class of 2014, effective in 2010-2011. •End of Course Algebra II assessment will be required, beginning with the graduating class of 2016, effective in the 2012-2013 school year.	•4 years required at many New Jersey colleges and universities. •Most colleges require a minimum of Algebra II for admission. •All NJ community colleges now require Algebra II proficiency to enter college credit bearing courses. •Students wishing to pursue engineering or other mathematics-based fields need to take additional college-prep math.

Graduation Requirements Key

The Class of 2011
is currently in the 9th grade.

The Class of 2012
is currently in the 8th grade.

The Class of 2014
is currently in the 6th grade.

The Class of 2016
is currently in the 4th grade.

NJ STEPS Proposed Graduation Requirements

Subject	Current Regulations	Proposed Requirements	Assessments	P-16 Alignment
Science	3 years Aligned with the Core Curriculum Content Standards	3 years •Rigorous content that incorporates the equivalent of Lab* Biology, Lab Chemistry, and one other inquiry-based lab or technical science such as physics, engineering, or environmental science will be phased in. •Biology and two additional years of science will be required for the graduating class of 2012. •Chemistry and a third year of rigorous science will be required for the graduating class of 2014. •A fourth year of rigorous science should be required by local boards of education. *Lab courses involve hands-on problem solving, critical thinking, and inquiry based learning.	•End of Course Biology assessment will be implemented in 2007-2008 for all students taking the course that year. •End of Course Biology assessment will be required for the graduating class of 2012 effective in the 2008-2009 school year. •End of Course Chemistry assessment will be required for the graduating class of 2014 effective in the 2010-2011 school year.	•Many colleges and universities require or recommend four years of science for admission. •Several colleges also require lab-based courses. •Students looking to pursue careers in nursing or other medical fields need to take college-prep lab sciences.
Visual/ Performing Arts	1 year Aligned with the Core Curriculum Content Standards	1 year •Rigorous content in dance, music, theater, or the visual arts.	•Local District	
World Languages	1 year Aligned with the Core Curriculum Content Standards	1 year •Rigorous content that places emphasis on both the modes and purpose of communication •A second year of rigorous World Language study should be required by local boards of education.	•Local District	•Most New Jersey colleges require at least two years of the same world language as an entry requirement. •Begin language instruction at the elementary and middle school levels.

Graduation Requirements Key

The Class of 2011
is currently in the 9th grade.

The Class of 2012
is currently in the 8th grade.

The Class of 2014
is currently in the 6th grade.

The Class of 2016
is currently in the 4th grade.

NJ STEPS Proposed Graduation Requirements

Subject	Current Regulations	Proposed Requirements	Assessments	P-16 Alignment
Social Studies	3 years Aligned with the Core Curriculum Content Standards	3.5 years •Rigorous content that incorporates the equivalent of Civics, U.S. History, World History, Geography, and .5 years of Economics will be required for the graduating class of 2014.	•Local District	
Comprehensive Health and Physical Education	4 years Aligned with the Core Curriculum Content Standards	4 years •Rigorous content that focuses on wellness, integrated skills, drugs and medicines, human relationships and sexuality, motor skill development, and fitness.	•Local District	
Career Education and Consumer, Family, and Life Skills (Practical Arts)	1 year	1 year •Content equivalent to financial literacy, job skills, (interviewing, resume writing, career awareness) and life skills.	•Local District	
Technology	Integrated across all Core Curriculum Content Standards	Integrated •Technological literacy, consistent with the Core Curriculum Content Standards, must be integrated throughout the curriculum.	•Local District	
Electives	Electives	Electives •Electives aligned to skills and knowledge needed for higher education or the workplace.	•Local District	
TOTAL REQUIRED	20 units (5 credits each)	20.5 units (5 credits each)		

“We should not waste time debating whether or not to set challenging standards for students. We should spend our time doing what is necessary to prepare students to meet their challenging futures.”

Susan Cole, Ph.D.
president
Montclair State University

Chemistry

The Steering Committee looked very closely at the recommendations of stakeholders, in particular the recommendations of the New Jersey Association of School Administrators, in requiring Chemistry for graduation. The Steering Committee recognizes that a Lab Chemistry course, as it has been traditionally taught, would require facilities that may not be available in many schools for dramatically increased numbers of students.

The New Jersey Math and Science Coalition also recently issued recommendations to the Steering Committee. They suggest that there are opportunities to reorient how Chemistry is taught so that extensive capital investment by districts may not be required.

Therefore, the Steering Committee recommends that the New Jersey Department of Education work with the New Jersey Math and Science Coalition, science educators, and representatives from industry to develop a model curriculum in Chemistry. It also recommends that the New Jersey Department of Education monitor the progress of districts in implementing Chemistry to provide additional supports or time to districts experiencing significant challenges.

Algebra II

Perhaps the most controversial recommendation in this paper is the phased-in graduation requirement of Algebra II for all students. Some have cautioned against this mandate. Arguments have questioned the need for all students to study the subject, have asserted that it would be too difficult for many students, and have pointed to the difficulty of finding highly qualified teachers for the course.

These concerns are persuasive. But they are not as compelling as the data that indicate how important Algebra II is for lifelong learning. A growing body of research has recognized the crucial link between the study of advanced math in high school and success in college and work. In fact, many colleges and universities in New Jersey and across the nation require the completion of Algebra II for entry. Some apprenticeship programs also require mastery of the subject.

Although all students may not undertake further education immediately upon graduating high school, statistics indicate that their future success is likely to require some form of higher education at a future date. This has been evident in the programs created at institutions like Cumberland County College. In conjunction with the trade unions, the college has developed a portfolio program that allows successful apprentices to obtain a two-year degree.

Some of the controversy surrounding an Algebra II requirement stems from a lack of clarity of what Algebra II includes. Many may recall their experience with Algebra II including extensive trigonometry and pre-calculus. In addition, some may recall that a student taking Algebra II was destined to enter college immediately after high school. However, the Algebra II that will be required and tested includes the essential content that is relevant for students going into careers or higher education upon graduation.

The Algebra II requirement includes two sections. The first section is the core content that all students will need to learn and which will be assessed. The core content includes operations on numbers and expressions, equations, and inequalities, polynomials and rational functions, exponential functions, function operations, and inverses.

A crosswalk study between the licensing requirements, assessments of career and technical fields, the Algebra II core content and end of course assessment will be undertaken by the New Jersey Department of Education. The study may uncover ways that will allow Career and Technical Education students the option of learning Algebra II content within the context of their required coursework. It may also allow educators opportunities to use the real world applications in Career and Technical Education to make Algebra II more compelling to students in traditional college prep courses.

The second section of the Algebra II requirement is called the optional module. Students who take a pure Algebra II course in a traditional high school could learn the core as well as the optional module. The optional module will include data and statistics, probability, logarithmic functions, trigonometric functions, matrices, conic sections, sequences and series.

The Algebra II end of course assessment will only test the core content -- not the optional module. The purpose for offering the optional module is to ensure that students who will pursue higher levels of mathematics in high school such as pre-calculus and trigonometry will be prepared for those courses. In addition, six of New Jersey's 10 state colleges and universities require Algebra II or higher for admission.

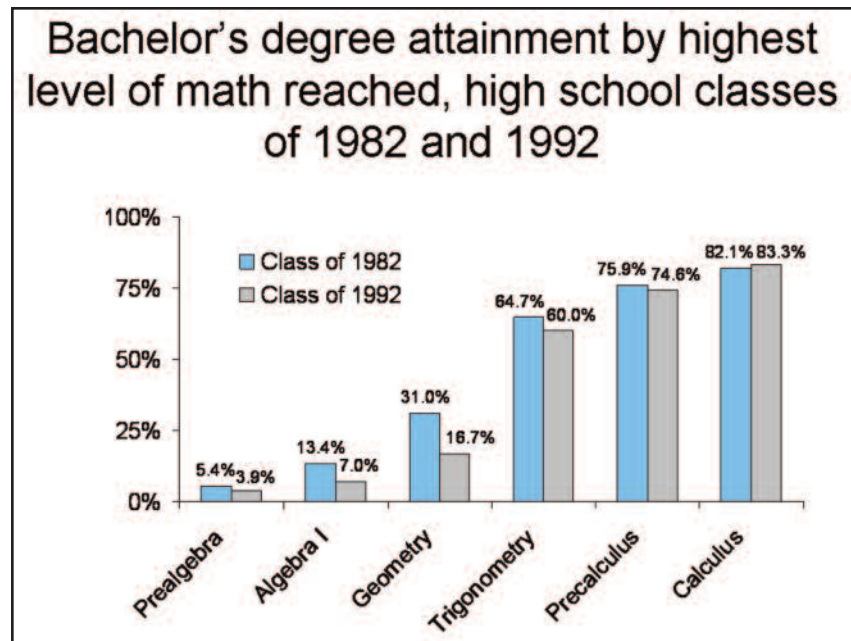


Chart: Source 15

An Algebra II graduation requirement is being adopted by an increasing number of states within the American Diploma Project Network. As of the writing of this paper, 17 states have revised their graduation requirements and all 17 are requiring Algebra II to graduate with a standard diploma. Without comparable requirements, New Jersey's students would not be competitive with students from states like New York, Pennsylvania, Michigan, and Delaware.

To better understand the challenge confronting the state in implementing the requirement, during the 2005 school year, the New Jersey Department of Education sent a survey to all New Jersey high schools, including charter schools, career technical education schools, adult high schools/evening programs, and comprehensive high schools to examine the high school graduation requirements in place for the Class of 2005 in the areas of mathematics, science, English/language arts, and social studies. (See Appendix F.)

The survey findings regarding mathematics and science (summarized below) indicate that all New Jersey public schools require between the state minimum of 15 credits to as many as 40 credits in each area, as follows:

Mathematics	Science
<ul style="list-style-type: none"> 91% of responding schools required 15 credits 0.25% of schools required 16 credits 8% of schools required 20 credits 1% of schools required more than 20 credits 	<ul style="list-style-type: none"> 100% of responding schools required at least 15 credits 2.6% of schools required 16-18 credits 1% of schools required 30-35 credits 0.5% of schools required 40 credits

A summary of specific course requirements in mathematics and science, as identified through the survey responses, is provided below.

Courses		% of Responding Districts Requiring Course for High School Graduation
Mathematics	Algebra I	66%
	Geometry	59%
	Algebra II	43%
Science	Biology	69%
	Chemistry	35%
	Physical Science	32%
	Earth Science	27%
	Physics	14%
	Space Science	1.3%

The long lead-time for the implementation of the Algebra II graduation requirement is intentional. It will allow students, schools, and educators to begin to prepare early for teaching and studying the subject. Clearly, ramping up to offer Algebra II for all students will be a challenge but not an insurmountable one, as evinced by recent developments in the American Diploma Project Network. Last year, nine ADP Network states – Arkansas, Indiana, Kentucky, Maryland, Massachusetts, New Jersey, Ohio, Pennsylvania, and Rhode Island – joined together to create a new Algebra II end of course exam. In addition, to capture economies of scale in test development, the common effort ensures that the assessment will truly determine a student’s level of achievement in Algebra II.

For the initial administration of the Algebra II end of course assessment, the New Jersey Department of Education had hoped to recruit schools to offer the test to 5,000 students. More than 12,400 students volunteered before the Department had to close the enrollment. It appears that an increasing number of districts are preparing to help their students meet this prerequisite for 21st century success.

The Carl D. Perkins Career and Technical Education Improvement Act of 2006

On the surface, the approaches of the Perkins Act and the American Diploma Project look very different. However, the 2006 revisions, which started implementation in 2007, are creating opportunities for synergy between the two. For example, new provisions require that states support CTE programs that include rigorous content aligned to challenging academic standards. States also must ensure that students who participate in these programs are taught to the same challenging academic standards available to all students.

Perkins funds are the only federal funds designated for CTE services. They provide important support to CTE programs throughout this state and others. Along with the rest of the country, New Jersey is responsible for implementing the requirements of the Carl D. Perkins Career and Technical Education Act of 2006 and the Department of Education recently submitted its five-year plan.

The purpose of the Perkins Act is “to develop more fully the academic and career and technical skills of secondary education students and postsecondary education students who elect to enroll in Career and Technical Education (CTE) programs.”

According to a recent Achieve Policy Brief, “[Perkins Act] provisions originally were designed to counter the practice that prevailed at one time when CTE students were held to lower academic expectations

than non-CTE students. They often were placed into a lower level 'non college-bound' track. While some of the provisions are holdovers from previous Perkins authorizations, including ensuring CTE students are taught to the same academic standards as their non-CTE peers, the new Perkins improves upon the legislative intent to eliminate the two-track approach and raise expectations for students who take CTE courses."

Next Steps:

The New Jersey Department of Education must:

- 1. Implement aligned language arts literacy and mathematics standards:** The State Board of Education adopted the aligned language arts literacy and mathematics standards that support student achievement of the ADP Network benchmarks on January 9, 2008.
- 2. Review and revise regulations:** Review and revise the New Jersey Department of Education's Standards and Assessment Code N.J.A.C. 6A:8 to reflect the recommended graduation requirements above. This process will involve defining the essential concepts within each of the content areas to ensure consistency in the knowledge and skills taught across schools and districts throughout the state.
- 3. Review and revise all Core Curriculum Content Standards:** Ensure that the NJ Core Curriculum Content Standards (CCCS) in science, social studies, the visual and performing arts, career education and consumer, family, and life skills, world languages, health and physical education, and technology are reviewed and updated in 2009 to reflect the breadth of 21st century skills and knowledge that students require to be successful in college and the workplace.
- 4. Conduct regular reviews of the standards:** Ensure that the standards are aligned to the demands of higher education and the workforce, and are internationally competitive.
- 5. Phase in the NJ STEPS Graduation Requirements:** Phase in the implementation of the NJ STEPS graduation requirements in order to give schools, students, parents, and teachers adequate time to prepare and restructure. This gradual approach will also help to ensure effective, consistent implementation of the enhanced requirements across the state. In accordance with the schedule below, students currently in grade 8 will be the first to benefit from these changes.

Phase I: Phase I will affect students entering 9th grade in the 2008-2009 school year. These students are the class of 2012, who are currently in the 8th grade. *

Phase II: Phase II will affect students entering the 9th grade in the 2010-2011 school year. These students are the class of 2014, who are currently in the 6th grade. **

Phase III: Phase III will affect students entering the 9th grade in the 2012-2013 school year. These students are the class of 2016, who are currently in the 4th grade. ***

NJ Phase-In of Graduation Requirements and Assessment Schedule

Year	Graduation Requirements	Required Assessments
2008-2009 (Phase I) *Graduating class of 2012, in grade 9 in 2008-2009, currently in the 8 th grade	<ul style="list-style-type: none"> •Language Arts Literacy – 4 years on grade level •Mathematics – 3 years, including content equivalent to Algebra I and two other years of rigorous math •Science – 3 years, including content equivalent to Biology •All Other Areas – as currently required 	<ul style="list-style-type: none"> •Language Arts Proficiency Assessment •Algebra I End of Course Assessment •Biology End of Course Assessment
2010-2011 (Phase II) **Graduating class of 2014, in grade 9 in 2010-2011, currently in the 6 th grade	<ul style="list-style-type: none"> •Language Arts Literacy – 4 years on grade level •Mathematics – 3 years, including content equivalent to Algebra I, Geometry, and one other rigorous math such as Algebra II, Statistics/Probability, Trigonometry, or an equivalent integrated math course •Science – 3 years, including content equivalent to lab Biology and lab Chemistry and one other inquiry based lab technical science such as Physics, engineering, or environmental science •Social Studies – 3.5 years including civics, U.S. history, geography, and .5 years of economics •All Other Areas – as currently required 	<ul style="list-style-type: none"> •All Phase I Requirements •Geometry End of Course Assessment •Chemistry End of Course Assessment
2012-2013 (Phase III) ***Graduating class of 2016, in grade 9 in 2012-2013, currently in the 4 th grade	<ul style="list-style-type: none"> •Language Arts Literacy – 4 years on grade level •Mathematics – 3 years, including content equivalent to Algebra I, Geometry, and Algebra II •Science – 3 years, including content equivalent to lab Biology, and lab Chemistry and one other inquiry based lab technical science such as Physics, engineering, or environmental science •Social Studies – 3.5 years including civics, U.S. history, geography, and .5 years of economics •All Other Areas – as currently required 	<ul style="list-style-type: none"> •All Phase II Requirements •Algebra II End of Course Assessment

6. Align curriculum: Utilize the NJ Quality Single Accountability Continuum (QSAC) monitoring and evaluation system to verify alignment of the curriculum in local districts. Alignment of the curriculum across the full P-12 spectrum will ensure that students are prepared in the earlier grades to meet the high standards of achievement in high school and to succeed in completing challenging content.

7. Move to quickly adopt the national standard for high school graduation rate calculation: This method of calculation will provide New Jersey with an actual count of how many students graduate with a diploma in four years.

Governors from each of the 50 states pledged to adopt this common definition for their high school graduation rate by signing a compact with the National Governor's Association in 2005. The U.S. Department of Education, under the No Child Left Behind (NCLB) Act, is also using an interim estimator of student progress in each state known as the Averaged Freshman Graduation Rate. This rate will be used while the Department helps states move to the calculation methodology recently mandated by United States Department of Education Secretary Margaret Spellings.

8. Support Individualized Education Plans for Special Education Students: Ensure that special education students continue to be guided by their Individualized Education Plans (IEPs).

Current Supporting Activities

Local Graduation Requirements—Many school districts throughout the state currently have graduation requirements that meet or exceed the requirements outlined in the NJ STEPS curriculum. Students who are on a college preparatory track may already take many, if not all, of the proposed content areas for entrance into colleges and universities throughout the country.

Abbott Secondary Education Initiative—In 2005, the NJ Department of Education launched a key secondary education redesign initiative created to improve teaching and learning in the state's lowest performing middle and high schools (grades 6 through 12) within New Jersey's Abbott districts. As part of this initiative, districts have been working to create smaller learning communities within large urban middle and high schools, implementing rigorous curriculum, and ensuring that every student receives regular, personalized attention from at least one adult professional. With the implementation of a new school funding formula, this reform will be expanded to all middle and high schools in New Jersey.

The Partnership for 21st Century Skills Initiative—New Jersey was recently recognized as a 21st Century Skills Leadership State. The Partnership for 21st Century Skills is a national education-business coalition that developed the country's first Framework for 21st Century Learning. The framework supports a college and work-ready curriculum in all content areas by including an emphasis on 21st century competencies, such as communication and innovation skills and information, media and technology skills. A key goal of the framework is also to promote an understanding of academic content at higher levels by weaving 21st century interdisciplinary themes (global awareness, financial, economic, business and entrepreneurial literacy and civic and health literacy) into core subjects. New Jersey's Education Plan: Preparing Global Thinkers, Workers and Leaders, contains the recommendations made in NJ STEPS and the Framework for 21st Century Learning to ensure that all students are provided with a rigorous, aligned P-16 world class education to succeed in postsecondary education, the work environment and community life in a global society.

World Class Students—The Business Coalition for Educational Excellence (BCEE) at the New Jersey Chamber of Commerce has implemented a New Jersey World Class Students program as part of their Learn More, Do More, Earn More Student Credentialing System (LDE). Through a one-day forum, the business community acknowledges and celebrates 52 students (one for each week of the year) who have challenged themselves to be the best they can be, and who have completed the World Class Students/State Scholars demanding course sequence: Algebra I, Algebra II, Geometry, Biology, Chemistry, Physics, four years of college-prep English, two years of the same world language, and three years of social studies, including a semester of economics. These World Class Students are nominated by teachers or administrators in their schools and recognized for challenging themselves to reach higher.

A Compact on State High School Graduation Data—The National Governors Association convened a Task Force on State High School Graduation Data to make recommendations about how states can develop a high-quality, comparable high school graduation measure. The task force also proposed complementary indicators of student progress and outcomes and data systems capable of collecting, analyzing, and reporting the data states need. The task force members found substantial consensus on which to build their findings and recommendations. Secretary of Education Margaret Spellings recently announced that the U.S. Department of Education would make this methodology mandatory for all states.

The New Jersey Schools to Watch Program—The New Jersey Schools to Watch Program recognizes excellence in middle level education. High-performing schools maximize student growth, support learning for all students, and prepare students for success in high school, college, and careers.

Student achievement tends to drop during the middle grades. Although there may be a number of theories on why this occurs, one thing is certain: middle level schools must reassess programs and services to ensure that all students can reach their potential. The New Jersey Schools to Watch Program is designed to help schools take a critical look at the needs of middle-level students, defined as students in grades 6, 7, and 8. The school does not have to be organized as a middle school in order to participate in this program.

In 2007, New Jersey became one of 16 states using the Schools to Watch framework for middle grades improvement.

RECOMMENDATION #2:

ASSESSMENT ALIGNMENT

Implement an efficient and effective assessment system that measures student achievement, provides data to address student learning and performance gaps, and is aligned with the expectations of higher education and the workplace.

The state assessment system must appropriately reflect and measure the knowledge and skills required of today's high school graduates by higher education and the 21st century workplace. It must also fulfill The No Child Left Behind Act (NCLB) mandates that require students be tested at regular intervals in elementary, middle, and high school.

Currently, the New Jersey High School Proficiency Assessment (HSPA) does not measure college or work readiness. In addition, not all of New Jersey high school students pass the HSPA. Further, New Jersey colleges and universities do not use scores from the HSPA for admissions or placement, because the test does not reflect postsecondary placement requirements.

The intention of redesigning New Jersey's assessment system is to make the system an efficient and effective way to measure how well students are meeting the standards. An efficient and effective assessment system will:

- Align high school graduation assessments with expectations of higher education and the workforce and vertically align assessments in earlier grades with these benchmarks.
- Set performance indicators that accurately measure student progress.
- Include a data and analytic system so educators can utilize data to assist in decision-making.
- Incorporate rigorous alternative assessment protocols for students requiring them.
- Track individual student progress and predict readiness.
- Identify successful practices and areas for improvement.

The implementation of the NJ SMART data system will make it easier to identify struggling students. Proven interventions and supports can then be provided to increase their chances to successfully learn the foundational knowledge and skills needed for success.

In order for students to be successful in an assessment system that measures rigorous standards, school curriculum must be aligned to state standards and assessments. The degree of such alignment currently varies from district to district in New Jersey.

Next Steps

The New Jersey Department of Education must:

1. Develop and implement end-of-course exams: Develop and phase-in end-of-course exams in math, language arts literacy and science that will replace the HSPA and are required to earn a high school diploma. The proposed assessments will be aligned with the expectations of higher education and the workplace. These assessments will be phased-in along with the NJ STEPS graduation requirements to give schools, students, parents, and teachers time to prepare.

Although these tests are called end-of-course exams, they are designed to measure the mastery of specific content that might be covered in various classes such as integrated math and career and technical education courses. The New Jersey Department of Education will work with local districts to set up guidelines on how to align the assessments with the courses.

The Steering Committee believes that the creation of end-of-course exams will significantly improve the consistency of course content across the state and the likelihood that all the state's students learn and perform at the same level in courses crucial to their future success.

Phase I: Phase I will affect students entering 9th grade in the 2008-2009 school year. These students are the class of 2012, who are currently in the 8th grade. *

Phase II: Phase II will affect students entering the 9th grade in the 2010-2011 school year. These students are the class of 2014, who are currently in the 6th grade. **

Phase III: Phase III will affect students entering the 9th grade in the 2012-2013 school year. These students are the class of 2016, who are currently in the 4th grade. ***

NJ Phase-In of Graduation Requirements and Assessment Schedule

Year	Graduation Requirements	Required Assessments
2008-2009 (Phase I) *Graduating class of 2012, in grade 9 in 2008-2009, currently in the 8th grade	<ul style="list-style-type: none"> •Language Arts Literacy – 4 years on grade level •Mathematics – 3 years, including content equivalent to Algebra I and two other years of rigorous math •Science – 3 years, including content equivalent to Biology •All Other Areas – as currently required 	<ul style="list-style-type: none"> •Language Arts Proficiency Assessment •Algebra I End of Course Assessment •Biology End of Course Assessment
2010-2011 (Phase II) **Graduating class of 2014, in grade 9 in 2010-2011, currently in the 6th grade	<ul style="list-style-type: none"> •Language Arts Literacy – 4 years on grade level •Mathematics – 3 years, including content equivalent to Algebra I, Geometry, and one other rigorous math such as Algebra II, Statistics/Probability, Trigonometry, or an equivalent integrated math course •Science – 3 years, including content equivalent to lab Biology and lab Chemistry and one other inquiry based lab technical science such as Physics, engineering, or environmental science •Social Studies – 3.5 years including civics, U.S. history, geography, and .5 years of economics •All Other Areas – as currently required 	<ul style="list-style-type: none"> •All Phase I Requirements •Geometry End of Course Assessment •Chemistry End of Course Assessment
2012-2013 (Phase III) ***Graduating class of 2016, in grade 9 in 2012-2013, currently in the 4th grade	<ul style="list-style-type: none"> •Language Arts Literacy – 4 years on grade level •Mathematics – 3 years, including content equivalent to Algebra I, Geometry, and Algebra II •Science – 3 years, including content equivalent to lab Biology, and lab Chemistry and one other inquiry based lab technical science such as Physics, engineering, or environmental science •Social Studies – 3.5 years including civics, U.S. history, geography, and .5 years of economics •All Other Areas – as currently required 	<ul style="list-style-type: none"> •All Phase II Requirements •Algebra II End of Course Assessment

- 2. Prepare end-of-course assessments for federal review:** Work with higher education to submit the Language Arts Literacy Proficiency Assessment and Algebra II end of course assessments for review for use as a placement exam for New Jersey colleges and universities under Title IV. Work to ensure that the assessments will be sufficient for college placement and to qualify for financial aid under the federal Pell Grant program.
- 3. Implement a rigorous alternative assessment model:** Develop and implement a rigorous, content-focused alternative assessment model to be implemented in consideration of students who have difficulty with standardized exam(s) to replace the Special Review Assessment (SRA). The assessment should focus on Algebra I, Geometry, Algebra II, Biology, Chemistry, and language arts literacy content.
- 4. Add a performance-based assessment method:** Include a performance-based alternative assessment method to all high school assessments in order to create a fuller picture of student achievement.
- 5. Align data systems:** Work with the New Jersey Commission on Higher Education and the New Jersey Department of Labor to align the NJ SMART data system with the state's Student Unit Record (SURE) system for higher education and the workforce. This alignment may measure student progress as a group as they progress from K-12 to higher education.

Current Supporting Activities

Biology End-of-Course Assessment – Effective with the 2007-2008 school year, the HSPA science test is being replaced by an end of course Biology test, to be administered on May 19, 2008, with a make-up testing day on May 22, 2008. Achieving proficiency on the test will not be a graduation requirement in the 2007- 2008 school year. This assessment will be a graduation requirement for the graduating class of 2012 in 2008-2009.

In association with this first end-of-course Biology test, the New Jersey Department of Education and its grantee, the New Jersey Performance Assessment Alliance (NJPAA), are conducting a stand-alone field test of a Biology performance assessment prompt. Districts may choose to administer this one-day (approximately 90 minute) field test on May 20, May 21, or May 23, 2008. This performance assessment field test represents a major step toward the inclusion of performance assessments in the statewide assessment program.

Algebra II End-of-Course Assessment—The New Jersey Department of Education will be pilot-testing an end-of-course Algebra II test in approximately 60 New Jersey school districts that have volunteered to participate. The pilot test will be administered in May 2008.

RECOMMENDATION #3:

HIGHLY EFFECTIVE TEACHERS AND SCHOOL LEADERS

Recruit, support, and retain highly effective teachers and school leaders, with particular attention to high need schools and high need subject areas to ensure all high school students graduate ready for college and work.

New Jersey must attract and retain the best and the brightest in the teaching profession and to positions of school leadership. In order for all New Jersey high school students to achieve to high standards, teachers need deep content knowledge and a broad repertoire of pedagogical skills that will enable them to engage and succeed with all learners. Research shows that professional development for teachers is most successful when it is sustained, intensive, focused on content and pedagogy, tied to the learning needs of students, collaborative, and job-embedded.

The jobs of principals, supervisors, and superintendents are challenging. Expectations and accountability for school performance have increased and school leaders will need preparation and support to meet these challenges. School districts with the greatest concentrations of poverty, the most challenging conditions, and the lowest salaries find it increasingly difficult to attract and retain candidates for leadership positions.

New Jersey is currently facing a shortage of qualified math, science, and special education teachers, soon to be exacerbated by the retirement of large numbers of veteran teachers. Teacher attrition during the first five years of teaching is a national problem. It is especially acute in low-performing, high poverty schools where experienced, expert teachers are most needed.

According to the New Jersey Education Association (NJEA), New Jersey schools hire 4,000 new teachers each year. Among members of the NJEA, 45% have fewer than four years of experience.

Students will only be able to learn the foundational knowledge and skills necessary for success in higher education and the workforce if teachers and school leaders are provided support for and prepared to teach to the higher standards.

Efforts to ensure that New Jersey schools have the highest quality teachers have begun with the:

- State Board of Education adoption of revised Praxis II tests and qualifying scores for instructional endorsements.
- Adoption of new tests and qualifying scores for early childhood education and career and technical education.
- Implementation of the Higher Education Taskforce's recommendations that strengthen teacher preparation programs by moving to content specific standards and a new Department of Education program approval system process.

Next Steps

The New Jersey Department of Education must:

1. **Strengthen educator recruitment and retention in the state:** A partnership with key stakeholders will research, identify, and implement appropriate recruitment initiatives for teachers and education leaders. They will also create a communications campaign to strengthen awareness and interest in the education profession within the state. This campaign will highlight the benefits of entering the education profession and better position education as a respected and noble profession that provides a good quality of life in the state.
 - a. **Implement a One-Stop Web Portal for Teaching in New Jersey:** Develop a "New Jersey Site for Teaching" Web portal that will provide information on professional development opportunities for existing teachers, information on education professions, including licensure in New Jersey, incentives for teaching in New Jersey, and scholarship opportunities for high school students, college students, and career-changers.

- b. **Identify Strategies to Motivate Educators:** Identify best practices to encourage teachers to work in New Jersey. Explore strategies such as federal loan forgiveness and mortgage assistance programs to attract and retain the best teachers in areas of shortage (e.g., math and science education and special education), in urban school districts, and in low-performing schools.
 - c. **Explore Early Recruitment Best Practices:** Investigate the feasibility of creating programs to encourage current middle and high school students to consider a career as an educator, such as creating a component of the NJ STARS program to encourage high school students to become math or science teachers.
- 2. **Evaluate and improve the efficacy of teacher preparation programs in New Jersey:** Examine the pathways of entry into the education profession and ensure that there is a seamless process for individuals to enter the field to help fill teaching vacancies in high-need subjects. Investigate ways to improve the teaching profession at the college level.
- 3. **Evaluate and implement proven models of professional development:**
 - a. **Identify and Communicate Successful Models of Professional Development Plans for teachers and school leaders:** Identify and communicate proven models of professional development programs that are sustained, intensive, focused on content and pedagogy, tied to the learning needs of students, collaborative in approach, and job embedded. Provide resources and tools to help districts align programs and professional learning plans with the content knowledge and instructional strategies required to prepare students for graduation. The learning plans will be implemented at the local district level to ensure that principals, teachers, and other staff members can address their professional development needs to improve student learning.
 - b. **Teacher and School Leader Mentorship:** Support local school districts in providing meaningful instruction, support, and intensive high quality mentoring for new teachers and leaders to stem the tide of attrition.
 - c. **Monitor Professional Development Programs:** Evaluate the quality of professional development for teachers and school leaders and provide assistance to school districts in adjusting their professional development programs to support the state's vision for improving high schools.

Current Supporting Activities

National Board Certification: The New Jersey Chamber of Commerce, The Department of Education, and the federal government partner to provide teachers with mentoring and financial support to pursue and attain National Board Certification in their subject areas. More than 160 studies, reports, and papers suggest that National Board Certified teachers in classrooms profoundly impact student learning.

Praxis Passing Scores: The passing scores for the Praxis examinations are in the process of being raised to match the higher-tier scores required by other states nationally.

Math, Science, and Technology Grant Program: The Department of Education has awarded six colleges—Montclair State University, Rowan University, Stevens Institute of Technology, The Richard Stockton College of New Jersey, Rutgers, The State University of New Jersey, and William Paterson University—\$4 million in Mathematics and Science Partnerships grants, made available under the federal No Child Left Behind Act. These colleges will help approximately 350 New Jersey mathematics and science teachers enhance their knowledge and skills through a yearlong program.

The program aims to improve the academic achievement of students in mathematics and science as well as improve teacher content knowledge, skills, and classroom practices. The program also provides follow-up activities such as curriculum alignment, distance learning, and activities that train teachers to use technology in the classroom. The program will increase the number of highly qualified teachers in mathematics and science and include learning opportunities aligned to professional standards for teachers as defined in state education regulations and linked to the Core Curriculum Content Standards.

RECOMMENDATION #4:

LEARNING COMMUNITIES AND PERSONALIZED EDUCATION

Redesign high schools as learning communities that utilize personalized learning approaches to prepare and support students in meeting the new standards and high school graduation requirements.

High schools were designed in the 19th century. Their mission was to prepare the majority of students to go directly into a predominantly industrial workforce.

This model, largely still in effect, does not reflect the requirements for individual success in the 21st century. The reality is that all students, regardless of their future plans, need to take a rigorous curriculum in order to be prepared for the complex world into which they will graduate. And many students will require more individualized attention, more relevant coursework, or restructured learning experiences to help them meet higher expectations.

To achieve this, the Department of Education will commit to providing local school districts with support, flexibility, and resources in this effort. Special consideration will be given to schools and students that are struggling to meet current standards and high school graduation requirements. The needs of gifted and talented students will also be considered.

Research shows that high schools that function as learning communities and utilize personalized approaches are effective in increasing student outcomes. According to the **A Call to Action: Transforming High Schools for All Youth** report from the National High School Alliance, personalized learning environments have:

- An academically rigorous curriculum.
- Instruction that is relevant to real-world context and that builds upon student and community assets.
- A network of adults who work together and with students to access the necessary academic and social resources.
- Interactions among and between adults and students defined by trust, respect, open communication, and clear, shared expectations.
- A safe and welcoming climate.

Personalized learning will be particularly critical in ensuring that struggling students are able to succeed. There is concern that raising high school graduation standards will result in an increase in the dropout rate among secondary school students. A paper prepared in June 2006 by Achieve, Inc., suggests that three important lessons can be learned from recent research on and experience with dropout prevention issues:

1. The dropout problem is not an inevitable, immutable feature of American education. Demographics matter, but what happens in schools has a great impact on whether students stay in school and graduate. Recent research suggests that, even for students who have difficult home lives, dropping out has much to do with how schools operate and the educational experiences students have within them. Moreover, the conventional wisdom that dropping out is a highly idiosyncratic process driven by entirely personal factors is not true for most students who leave school. Most dropouts follow identifiable pathways through the education pipeline.
2. We can do a much better job predicting which students are most likely to drop out. An ongoing study in Philadelphia can now identify half of all eventual high school dropouts as early as 6th grade. Also, a group of Chicago researchers can predict 85 percent of eventual dropouts in that city's public school system based on just a few facts about the system's 9th graders.

3. Finally, we know more than ever before about how schools contribute to high dropout rates and what educators can do to solve the problem.¹⁶

At the most basic level, dropping out is not typically an outcome of a rigorous curriculum; it is the result of other factors in the school environment and educational experience. Therefore, the challenge is not how to prevent more students from dropping out once the graduation standards are increased, but how to identify potential dropouts early and to intervene before a student is lost regardless of the curriculum standards and high school graduation requirements.

Next Steps

The New Jersey Department of Education must:

1. **Measure the success of new high school models through the NJQSAC process:** Ensure that NJQSAC accommodates new models of high school in its evaluation methods and continuous improvement processes and recommendations.
2. **Develop infrastructure and mechanisms to provide increased technical assistance to local education leaders:** The New Jersey Department of Education in collaboration with the state's education organizations will provide increased technical assistance to state and local education leaders. The department will work with school leaders to clearly define the roles of high school principals and superintendents.
3. **Implement data-based decision making:** Sustain and enhance current efforts to help teachers and school leaders prepare for and implement programs that utilize data to improve student achievement such as the New Jersey Principals and Supervisors Association's Assessment Literacy Institute.
4. **Identify and communicate information on proven practices:** Along with the New Jersey High School Redesign Steering Committee, identify and disseminate information on proven practices and successful strategies in high school reform currently being implemented in local school districts throughout the state and across the nation for replication and adaptation in New Jersey high schools.
 - a. **Successful Strategies from Current Initiatives:** Integrate successful practices and strategies from existing secondary education initiatives in New Jersey.
 - b. **Academic Learning Models for Struggling Students:** Identify and communicate information on successful learning models such as accelerated instruction, extended learning time, dropout prevention, recovery programs, extra help and flexible scheduling (e.g., double periods) that are currently in place in states across the country to address the unique needs of students who may struggle to meet the higher standards of achievement. The focus will be on models that integrate an "early warning data system," as proposed by Achieve, Inc.
 - c. **Social-Emotional Learning and Intervention Initiatives:** Provide models of effective social-emotional learning and intervention programs to assist struggling schools and struggling students through The Department of Education's Office of Educational Support Services.
5. **Evaluate and implement models of personalized learning plans for all students:** Work with local school districts to evaluate and implement personalized learning strategies for all students.
 - a. **Six Year Educational Plan:** Each New Jersey student should have a six-year education plan, encompassing their high school years and two additional years of higher education, workforce training, skilled employment, or military service.

Thirty years ago, most teenagers who dropped out of high school could expect to find a well-paying job, and most who worked hard could expect to climb the economic ladder. But the world has changed. Today, high school dropouts face diminishing opportunities and a lifetime of financial struggle. In fact, the median earnings of high school dropouts declined by about a third between 1971 and 2002.¹⁷

- b. **Ensure Strong Adult-Student Relationships within the School:** Each student should have an adult mentor to assist them with accomplishing their goals. The National Association of Secondary School Principals' Breaking Ranks II report recommends that every high school student have a mentor, or Personal Adult Advocate, to help personalize the education experience.
 - c. **Flexible Options for Meeting New Requirements:** Investigate the development of a "crosswalk" between some industry exams and required content to allow career and technical education (CTE) students to meet the requirements of the CTE program and the NJ STEPS graduation requirements simultaneously.
- 6. Support Individualized Education Plans:** Ensure that the Individualized Education Plans (IEPs) continue to be the primary curriculum and assessment determinant for students with disabilities.
- 7. Expand use of 12th grade option in grades 9, 10, and 11:** Provide guidance to high schools in expanding the use of the 12th Grade Option. This program allows high school seniors to begin preparing for a college education or a career during their senior year. This program is coordinated through the New Jersey Department of Education and includes some of the following activities:
- Dual enrollment in college courses.
 - Participation in structured learning experiences.
 - Enrollment in technical courses (in the high school, college and proprietary schools).
 - Study abroad through exchange programs or with nationally or regionally accredited institutions of higher learning.
 - Capstone projects requiring in-depth research.
- 8. Identify federal, private and foundation funding sources:** To help construct and renovate science, technology, engineering, and mathematics (STEM) facilities as well as obtain technology that will enable virtual methods of teaching STEM.

Current Supporting Activities

LearnDoEarn.org—Learn Do Earn (LDE) is a national Student Credentialing System dedicated to ensuring those students – and their parents – have the information they need to make the best possible academic, behavioral, career, and financial decisions in middle and high school. LDE awards credentials and certificates to students who meet the criteria defined in each of its five programs. Students can earn credentials and certificates they can use in college admissions processes and job interviews.

Current College Bound Grant Program—Established in 1986, the College Bound Grant Program addresses the educational needs and aspirations of at-risk youth in grades 6-12 in Abbott School Districts. The grant supports pre-college educational enrichment activities to help ensure completion of secondary school; to increase college admission, retention, and graduation rates of these students; and to encourage the successful pursuit of postsecondary education in the sciences, mathematics, or technology. Statewide, the programs serve over 2,000 students.

New Jersey GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Programs)—Is a discretionary grant program funded by the U.S. Department of Education and administered by the New Jersey Commission on Higher Education. Its goal is to increase the number of low-income students who are prepared to enter and succeed in postsecondary education. The program encourages students to obtain college degrees by providing a variety of services including:

after-school and Saturday tutoring, summer programs, mentoring, counseling, test preparation, information about financial aid, and college visits. The initiative also emphasizes the importance of taking rigorous high school courses to prepare for postsecondary education and includes scholarships for students who attend eligible New Jersey institutions. The program is available in 30 middle and high schools in five urban centers.

NJ SMART Database—Governor Corzine and the New Jersey State Legislature have indicated that a statewide student database supporting the tracking of student academic outcomes is a crucial need. This database can be used to identify struggling students early and offer needed support.

Abbott Secondary Education Initiative—In 2005, the department launched a key secondary education redesign initiative designed to improve teaching and learning in the state's lowest performing middle and high schools (grades 6 through 12) within New Jersey's Abbott districts. As part of this initiative, districts have been working to create smaller learning communities within large urban middle and high schools, implement rigorous curriculum, and ensure that every student receives regular, personalized attention from at least one adult professional. With the implementation of a new school funding formula, this reform will be expanded to all secondary schools in New Jersey.

RECOMMENDATION #5:

P-16 ALIGNMENT

Establish a council composed of a diverse group of key stakeholders to create a seamless, aligned system of public education in New Jersey.

The New Jersey High School Redesign Steering Committee realizes that increasing student achievement at the high school level begins in pre-school and builds at every level thereafter. This preparation can be accomplished only through a clear and consistent alignment of the educational system from pre-school through four years of college (P-16) or other training or education that occurs after high school.

Aligning the educational system will:

- Ease the transition from middle school to high school and to college.
- Help monitor students at all levels from pre-school to college.
- Ensure all students are on grade level.
- Monitor student progress and implement interventions to decrease the high school dropout rate.
- Decrease the number of students needing remediation in college.
- Improve student performance in technical school and training for trades.
- Increase the college completion rate.
- Ensure that New Jersey remains competitive both nationally and internationally by creating a workforce that is prepared for high skilled jobs and lifelong learning.

According to the Southern Regional Education Board (SREB), alignment is defined as an agreement on clear, shared performance expectations for students at each level. First, the curriculum across the P-12 education spectrum must be aligned. Second, the P-12 system must be aligned with the New Jersey's higher education and post-secondary training system. This would involve the following:

- Aligning high school curriculum and expectations with the requirements of higher education.
- Creating high school exit assessment instruments that measure student readiness to enter higher education and other post-secondary training programs. These assessment instruments must be adopted by the state's higher education community and used to place students into the appropriate college-level courses.
- Enhancing New Jersey's student data system to provide longitudinal data that will follow a student through his or her entire educational career.

In order for New Jersey to accomplish this vision, a council must be formed to focus on the challenges of aligning and improving the state's education system. This council should have a commitment to long-term improvements in student achievement that support a high quality of life in the state, include representation from key stakeholder groups, and focus on those issues that cover multiple parts of the educational continuum. Its mission will support but be different from those of the State Board of Education and the Commission on Higher Education. The P-16 Council will help facilitate directional and policy continuity between gubernatorial administrations.

Next Steps

Using models developed by other successful states, the Steering Committee recommends that state leadership should collaborate to:

1. **Create a diverse P-16 council:** A diverse group of individuals representing key leaders from P-16, business, industry, trade unions, government, parents, and the overall community must work together to prepare all students for success and ensure alignment of the P-16 educational system.

- 2. Establish scope of work:** The council will focus on increasing student achievement in order to preserve a high quality of life in the state. The council will:
 - Continue to evaluate standards, graduation requirements, and assessments in light of college and workplace expectations.
 - Build consensus for and awareness of educational alignment.
 - Monitor progress of the educational system and hold responsible parties accountable for appropriate outcomes.
 - Ensure schools have the support and resources necessary to achieve all goals.
- 3. Consider options for providing schools with greater flexibility:** Consider options for providing greater flexibility to schools by evaluating structural requirements such as seat-time and Carnegie units that may limit school's flexibility in helping student meet the standards.
- 4. Align higher education and K-12 data systems:** Work with the New Jersey Commission on Higher Education and the Department of Labor to align the NJ SMART data system with the state's Student Unit Record (SURE) system for higher education and the workforce.

Current Supporting Activities

College Transfers—Governor Corzine recently signed legislation requiring New Jersey's public four-year colleges and universities to accept credits earned at any of the state's 19 county colleges. This will help students greatly in making a seamless transition from a two to a four-year institution of higher education in New Jersey. The county colleges also plan to align their core-class standards to ensure that all community college graduates are adequately prepared to continue their education or enter the workforce. The Steering Committee recommends that all New Jersey colleges and universities follow suit and accept credits earned at any of the state's county colleges.

NJ SMART Database—The New Jersey Department of Education implemented in 2007-2008 the NJ Standards Measurement and Resource for Teaching (NJ SMART), a comprehensive data warehouse, student level data reporting system, and unique statewide student identification system (SID). Governor Corzine and the New Jersey State Legislature have indicated that a statewide student database supporting the tracking of student academic outcomes is a crucial need. Implementation of NJ SMART must also include seamless alignment of the P-16 educational system, by providing a critical longitudinal data link to higher education.

Cumberland County HSTW/College & Career Transition Initiative—Cumberland County is beginning the second year of a countywide pilot High Schools That Work (HSTW)/College & Career Transition Initiative (CCTI) that is receiving national attention. This is being coordinated through the leadership at Cumberland County College and has resulted in enhanced communication and alignment of courses between and among all high schools and the college in Cumberland County. Teachers and leaders from each high school and the college have participated in joint professional development activities that will continue throughout the next year.

APPENDIX A:

AN OVERVIEW OF

HIGH

SCHOOLS

IN

NEW JERSEY

(INFORMATION

PRESENTED AT

PUBLIC MEETINGS)

High schools were designed in the 19th century. Their mission was to prepare the majority of students to go directly into a predominantly industrial workforce. This model, largely still in effect, does not reflect the realities of the 21st century. There is an ever-widening gap between what students are learning and what they need to know to lead productive adult lives. This gap affects all schools and all students throughout the state, regardless of race or socioeconomic status.

The world is changing, and even entry-level jobs now require advanced knowledge and skills, and additional education. Currently, jobs that require at least some postsecondary education are expected to make up more than two thirds of new jobs.¹⁸ By the time today's kindergartners enter the workforce, that number will be even higher.

What do today's young people need to know? Years ago, that question would be answered depending on what a student's plans were after high school. Today, an unprecedented convergence has occurred among the necessary knowledge and skills required for student success in higher education or the workforce. Findings of extensive research conducted by the American Diploma Project (ADP) Network have revealed that students need to be prepared with the same knowledge and skills—no matter what their plans are after graduation.¹⁹

The reality is that today's blue-collar jobs now require high-level skills. For example, the mathematics skills needed to succeed in a college course are nearly identical to those that today's entry-level machine operator would need. Today's auto mechanics need to be able to read at a level equivalent to a junior in college in order to comprehend complex technical writing/manuals. Today's sheet metal workers need algebra, geometry, trigonometry, and technical reading skills.

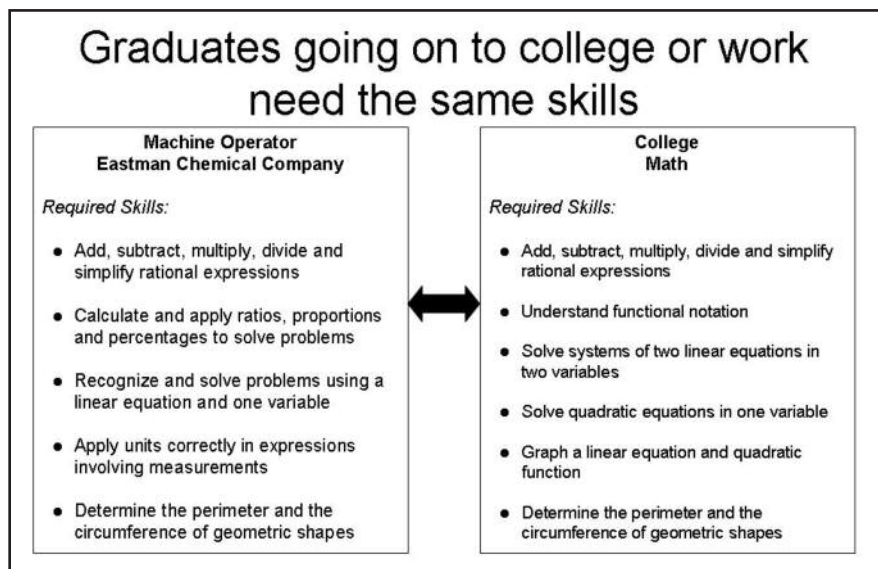


Chart: Source 20

Part of the reason for this remarkable convergence of required skills is that the world is changing. In fact, the world is changing so quickly that most of the jobs today's children will take when they grow up have not yet been invented—and many of the lower-end jobs that required a high school diploma will be gone.

New technologies are being developed each day, reshaping our way of life and eliminating lower-skill jobs. For example, toll takers are being replaced by E-Z Pass, telephone operators by voice recognition systems, and bank tellers by ATM machines and online banking programs.

Nationally, the share of new jobs over the decade from 2000-2010 will increasingly require at least some postsecondary education. Only one tenth of these new jobs will hold out any opportunity for high school dropouts and less than one quarter will be open to those who hold only a high school diploma. The remaining jobs will require the knowledge and skills of workers prepared with some postsecondary education or a bachelor's degree.

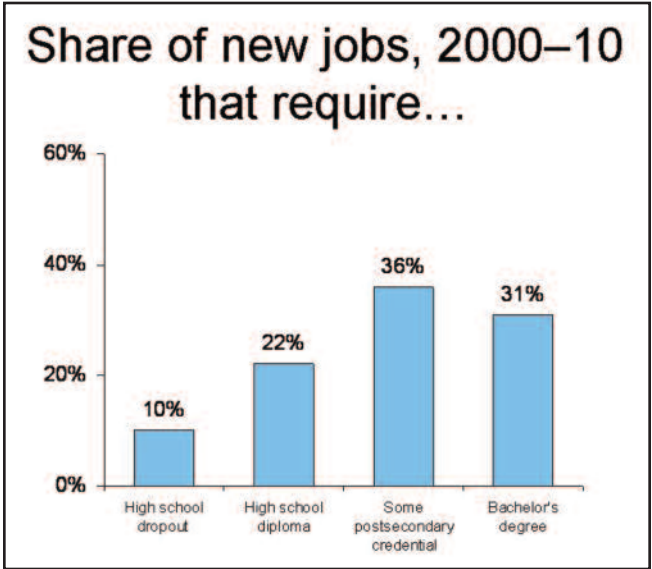


Chart: Source 21

A person's earning power is directly linked to his educational attainment. Therefore, not only will more jobs be available for those with greater educational preparation, but also the greatest earnings potential (on average) will be reserved for those with postsecondary education and training.

More learning means higher earnings

Education Level	Average Annual Earnings	Average Lifetime Earnings
High School Dropout	\$22,000	\$1.1 million
High School Diploma	\$31,000	\$1.4 million
Associate's Degree	\$38,000	\$1.8 million
Bachelor's Degree	\$50,000	\$2.5 million

Chart: Source 22

Despite the ever-increasing importance of a solid educational foundation, just 34 percent of high school graduates are prepared for college-level classes in English, math, reading, and science, according to a recent college readiness report.²³ These under-prepared students often require remedial education in college, but taking even one remedial course makes it six times less likely that a student will graduate with a degree.

Most U.S. college students who take remedial courses fail to earn degrees

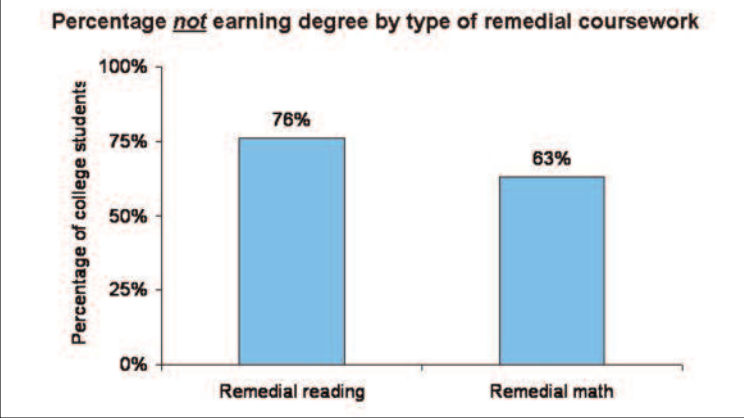


Chart: Source 24

With only 25 percent of today's high school graduates in New Jersey actually obtaining a college degree,²⁵ who will fill these jobs; and, will these jobs stay in New Jersey?

Coupled with the troubling state of our high schools is a very real concern over our ability to compete with the rest of the world.

High school graduation rate: United States trails most developed countries

OECD Reporting Country		Graduation Rate (%)
1	Denmark	100
2	Norway	97
3	Germany	93
4	Japan	92
5	Poland	90
5	Switzerland	90
7	Finland	85
7	Greece	85
9	France	82
9	Hungary	82
9	Italy	82
12	Czech Republic	81
13	Belgium	79
13	Iceland	79
15	Ireland	77
16	United States	73
17	Sweden	72
18	Luxembourg	68
18	Spain	68
20	Slovak Republic	61

Chart: Source 26

Our state cannot afford to ignore the educational progress of even one child.

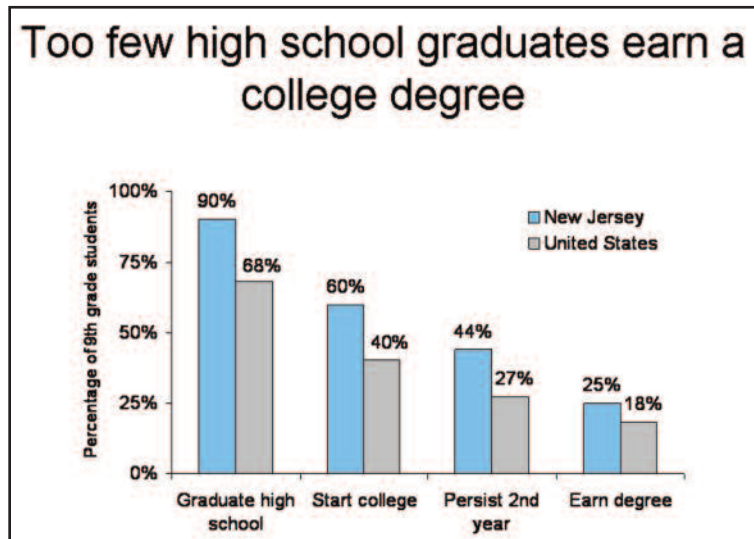
Additionally, an unprecedented convergence has occurred between the skills a student would need to enter the workforce upon graduation, or pursue further education. Today, every student, no matter what his or her future plans, will need to pursue a rigorous course of study in high school in order to be a prepared graduate.

Although New Jersey leads the nation in high school graduation rates, there is still a need to ensure that all students are adequately prepared for the rigors of higher education and the workforce. New Jersey cannot be satisfied when more than half of its students graduate from high school under-prepared—with far reaching consequences.

According to a survey by Achieve, Inc., 45 percent of high school graduates nationally are not prepared to advance beyond entry-level jobs.²⁷ A similar poll by the New Jersey Chamber of Commerce revealed that 99 out of 100 companies believed that high school graduates are under-prepared for the workforce in the state.²⁸

New Jersey students are also inadequately prepared for the challenges of postsecondary education. While our state leads the nation in college preparedness, it still leaves about half of its students underprepared for higher education. According to a 2005 Achieve, Inc. survey of college instructors, 42 percent of high school graduates are not prepared for college-level classes.²⁹

This lack of preparedness has serious ramifications. Only 25 percent of today's New Jersey high school graduates will actually obtain a college diploma. Currently, jobs that require at least some postsecondary education are expected to make up more than two-thirds of new jobs. Given this scenario, it is uncertain who will fill these jobs and whether these jobs will stay in New Jersey?



New Jersey's students are similarly affected by a lack of preparedness evidenced in remedial education rates at the state's community and public colleges and universities.

New Jersey public college and university remediation rates

Institution	% Needing Remediation
Kean	70%
Montclair	54%
New Jersey City University	62%
NJIT	40%**
Ramapo	23%
Rowan	21%
Rutgers	33%
Stockton	14%
The College of New Jersey	8%
William Paterson	72%
Total	40%

Chart: [Source 31](#)

Community college remediation rates

Community College	% Needing Remediation
Atlantic Cape	77.6%
Bergen	81.8%
Brookdale	79.8%
Burlington	73.8%
Camden	81.0%
Cumberland	80%
Essex	91.4%
Gloucester	73.2%
Hudson	67.9%
Mercer	83%
Middlesex	78.5%
Morris	76%
Ocean	67.7%
Passaic	96.3%
Raritan Valley	78%
Salem	92.5%
Sussex	75%
Union	67%
Warren	75%
Total	77.8%

Chart: [Source 32](#)

Nearly two-thirds of New Jersey's students will take six years to graduate from college with a bachelor's degree. Only 13.2 percent of students will graduate from a community college in New Jersey within three years.

New Jersey state college and university graduation rates

Institution	6-Year Graduation Rate
Kean	45.1%
Montclair	58.3%
New Jersey City University	38.1%
NJIT	55.2%
Ramapo	57.1%
Rowan	62.2%
Rutgers	69%
Stockton	61.8%
The College of New Jersey	82.7%
William Paterson	48.1%
Total	63.2%

Chart: Source 33

Community college retention/graduation rates

Institution	3-Semester Retention (Returning Sophomores)	3-Year Graduation
Atlantic	57.3%	17.7%
Bergen	64.7%	10.6%
Brookdale	66.4%	18.8%
Burlington	64.7%	11.7%
Camden	62%	10.8%
Cumberland	62.7%	19.6%
Essex	53%	5.7%
Gloucester	61.9%	14.4%
Hudson	58.3%	5.4%
Mercer	60.5%	16.1%
Middlesex	62.7%	11%
Morris	65.2%	21.3%
Ocean	47.6%	19.6%
Passaic	56.6%	14.6%
Raritan Valley	63.3%	12.2%
Salem	50.6%	14.9%
Sussex	64.7%	19.7%
Union	53%	5.6%
Warren	56.1%	9.8%
Total	60.3%	13.2%

Chart: Source 34

The cost of lack of preparedness is great in terms of delayed entry into the workforce, and taking longer to complete a degree. The financial impact of these low graduation rates is also profound for New Jersey's families. For example, based on undergraduate in-state rates, the cost of a six-year college education would be \$55,116 for tuition only. If a student were able to complete his or her degree in four years, the cost would only be \$36,744—a 33 percent savings to the student and his or her family.

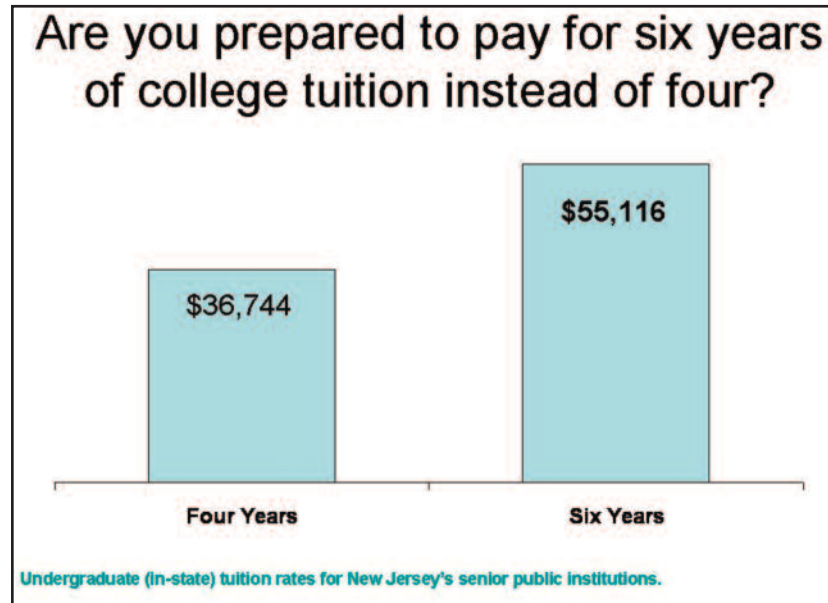


Chart: [Source 35](#)

The cost of education in New Jersey is great—and so are the potential rewards. Therefore, the public education system in New Jersey has an obligation to ensure that students are well prepared to make the most of that investment made by the state and its families. Remedial work at the postsecondary level must not become the standard; therefore, New Jersey must ensure greater preparation at the secondary level to ensure success beyond high school.

It is with this reality in mind that New Jersey began to look at the high school experience within the state. New Jersey's high school redesign efforts have been shaped both by its membership in Achieve, Inc.'s American Diploma Project (ADP) Network, and the leadership of the New Jersey High School Redesign Steering Committee.

APPENDIX B:

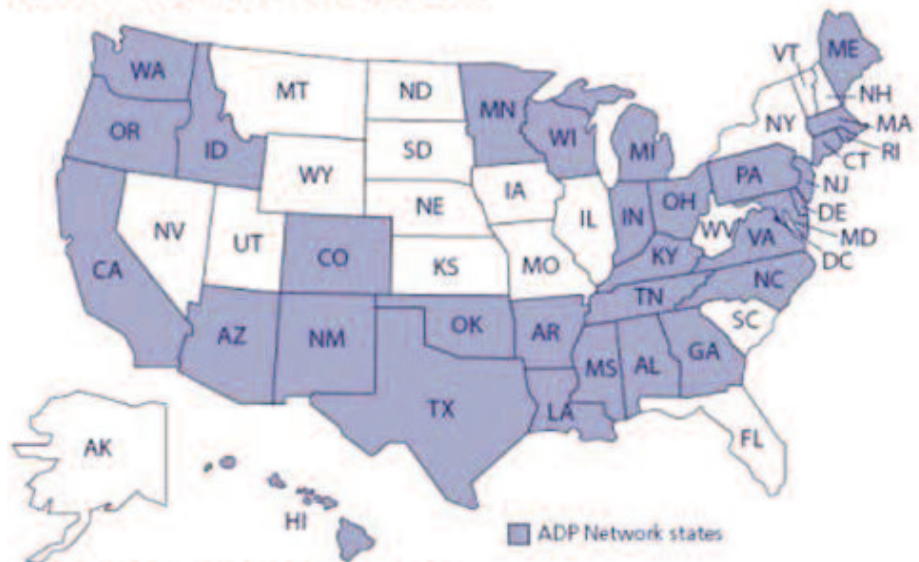
THE AMERICAN DIPLOMA PROJECT (ADP) IN NEW JERSEY

In August 2006, New Jersey Governor Jon Corzine, members of the state's higher education community, represented by the President's Council, and business community, represented by the New Jersey Chamber of Commerce, announced their endorsement of the American Diploma Project (ADP) benchmarks developed by Achieve, Inc. The ADP benchmarks have become the foundation for change and redesign of high schools in New Jersey.

Achieve is a national organization created by the nation's governors and business leaders to help states raise academic standards and achievement so that all students graduate ready for college, work, and citizenship. Through the ADP initiative, Achieve, Inc., in consultation with colleges, universities, and high-performance workplaces across the country, has identified what students need to know and be able to do to be successful in the 21st century, and created the ADP Network benchmarks based on their findings.

New Jersey is one of 32 states that is a member of the ADP Network.

ADP Network States



These 32 states have volunteered to pursue an ambitious agenda – beginning with the development of a comprehensive action plan – to achieve the ADP Network goals, which include a commitment to implement the following policies:

- Align high school standards with college and workplace expectations
- Align high school graduation requirements with college and workplace expectations, to include:

Eight strands of English

- Language
- Communication
- Writing
- Research
- Logic
- Informational Text
- Media
- Literature

Four strands of mathematics

- Number Sense and Numerical Operations
- Algebra
- Geometry
- Data Interpretation, Statistics, and Probability

- Use high school tests for college placement.
- Develop a P-16 longitudinal data system.
- Hold high schools accountable for graduating students college and work ready.

Following endorsement of the benchmarks, the focus of New Jersey's work shifted to aligning student high school outcomes to these expectations by enhancing the state's high school graduation requirements.

New Jersey's ADP Network goals are as follows:

1. Align New Jersey's high school standards in language arts literacy and math to the knowledge and skills required for success in postsecondary education and work.
2. Require all students to take a college- and work-ready curriculum to earn a high school diploma.
3. Administer to high school students a college- and work-ready assessment, aligned to state standards, that provides clear and timely information to address critical skills deficiencies while still in high school.
4. Assist middle and high schools to restructure programs and schools to deliver a rigorous standards-based curriculum to ALL students, and provide a personalized, engaging learning environment.
5. Design and offer sustained, intensive, job-embedded professional development to enable educators to meet these goals.

Although New Jersey has taken up the charge to redesign its high schools, our state is a relative late-comer to the process. This is surprising given that New Jersey is home to some of the world's leading high-tech, pharmaceutical, and financial employers. Currently, eight states have three or more of these policies in place. They are Arkansas, Delaware, Kentucky, Louisiana, Michigan, New York, Tennessee, and Texas.³⁶

States with three or more policies in place	8	AR, DE, KY, LA, MI, NY*, TN, TX
States with one or two policies in place	24	AZ, CA, CO, DC*, FL*, GA, IL*, IN, ME, MA, MN, MS, NE*, NEW JERSEY, NM, NC, OH, OK, RI, SD*, UT*, WA, WV*, WY*
States without policies in place	19	AL, AK*, AZ, CT, HI, ID, IA*, KS*, MD, MO*, MT*, NV*, NH*, ND*, OR, PA, SC*, TN, VT*, VA, WI

* States that are not members of the ADP Network, but have adopted educational policies that fit within the recommendations made by Achieve.

Of the eight states with three or more ADP policies in place, New Jersey exceeds the per-pupil spending of any other state; and in fact, Tennessee spends less than half.³⁷

State	Per-Pupil Spending	National Ranking
New Jersey	\$13,338	1
New York	\$12,638	3
Delaware	\$10,212	8
Michigan	\$9,094	16
United States	\$8,310	--
Louisiana	\$7,271	36
Texas	\$7,151	38
Kentucky	\$6,861	40
Arkansas	\$6,842	41
Tennessee	\$6,466	45

According to Achieve, Inc., 17 of the current 32 ADP states have already developed and finalized action plans for ensuring that today's high school graduates have the college- and work-ready skills necessary to ensure their success. New Jersey's plans are outlined in this document.

APPENDIX C:

NEW JERSEY'S SECONDARY EDUCATION INITIATIVES

High Schools That Work (HSTW)

High Schools That Work (HSTW) is a school improvement initiative founded on the conviction that most students can master rigorous academic and career/technical studies if school leaders and teachers create an environment that motivates students to make the effort to succeed.

HSTW is a national effort to engage state, district, and school leaders and teachers in partnership with students, parents, and the community to improve the way that high school students are prepared for work and further education. The foundation of HSTW is the belief that everyone in the education hierarchy must work together to align policies, resources, initiatives, and accountability efforts to support schools in adopting and implementing comprehensive school-improvement designs.

Specifically, HSTW seeks to advance the mathematics, science, communications, problem-solving, and technical achievement of students by providing a framework of goals, key practices, and key conditions for accelerating learning and setting higher standards. In creating this environment, more students will recognize that high school matters to their future and more students will become independent learners, able to set future educational and career goals and choose courses to take to achieve those goals.

New Jersey's HSTW initiative assists school districts serving grades 9–12 that offer both a combination of an academic and an approved occupational program. By implementing HSTW strategies for integrating and upgrading the level of academic studies, students receive both academic and career and technical education that addresses key practices leading to accelerating student achievement.

The HSTW initiative also emphasizes that the need to build a strong bridge from the middle grades to high school is essential in raising student achievement and keeping students in school. Students must be ready to meet the requirements of a rigorous curriculum when they begin high school. District, high school, and middle grades leaders work cooperatively to get middle grades students prepared for rigorous high school studies by:

- Establishing readiness indicators for challenging high school English, mathematics, and science courses;
- Aligning curriculum, teacher assignments, and assessments to the readiness indicators; and
- Setting goals to increase annually the percentages of students having successfully completed Algebra I by the end of grade eight.

Throughout New Jersey, 22 high schools are members of the HSTW Network. HSTW has also expanded its national network to now include a sub-network called “Technology Centers That Work” in an effort to address enhancing the quality of career and technical programs and schools that are typically shared time. As a result, three career technical education schools in New Jersey have become “Technology Centers That Work.”

Secondary Education Initiative/Abbott Districts

In 2003, the New Jersey Department of Education established a collaborative work group to develop policy and guidance to strengthen the high school experience and academic performance of students in grades 6 through 12 in the state's 31 Abbott school districts. The work group included secondary teachers and principals, Abbott district superintendents, academics, consultants, and representatives of the Education Law Center.

The group's recommendations were included in the Commissioner's administrative code. In 2005, the Department launched a key secondary education redesign initiative to improve teaching and learning in the state's lowest performing middle and high schools (grades 6 through 12) within New Jersey's Abbott districts. The goals of the initiative were to:

- Increase student achievement, attendance, graduation rates, and preparation for postsecondary plans;
- Create a more rewarding learning environment for students and teachers; and
- Ensure that students have strong connections to the school and the community.

To achieve these goals, the following strategies were established:

- Smaller learning communities within large urban middle schools and high schools;
- Rigorous curriculum; and
- Regular, personalized attention from at least one adult professional.

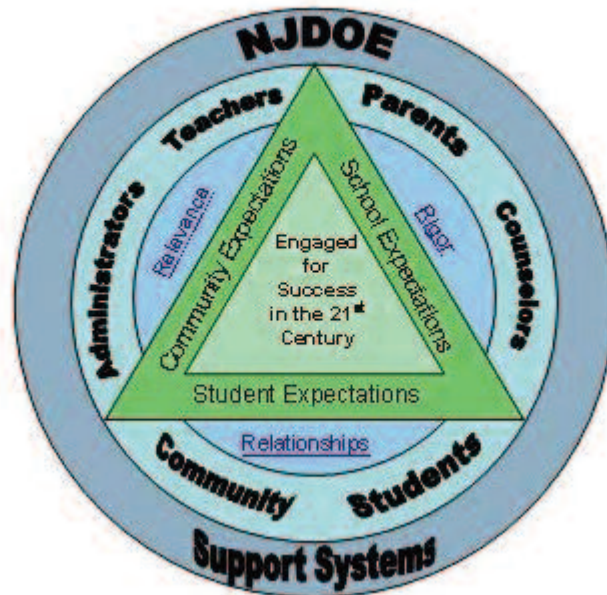
With the implementation of the new school funding formula in January 2008, these reforms will be expanded to districts throughout the state to provide all students with better opportunities for success.

APPENDIX D:

SYSTEMIC SUPPORT INITIATIVE FOR SECONDARY EDUCATION REFORM

In order for the recommendations of the High School Redesign Steering Committee to be more than simply a declaration of outcomes, this reform initiative requires an implementation plan containing specific and multiple approaches for professional development and outreach that include all stakeholders. The following diagram provides a framework for the systemic approach required for change in the redesign of education in New Jersey in the 21st century.

Systemic Support Initiative for Secondary Education Reform



At the core of this approach is the engagement of all students, educators, parents, business, and community stakeholders. Engaged stakeholders have high expectations and are vested in the kinds of meaningful and relevant learning and teaching needed for success in the 21st century.

A systemic plan for raising expectations for all students includes a focus on what students are able to do as a result of their learning (rigor), helps students understand how their learning connects to further learning and workplace settings (relevance), and promotes respectful relationships among teachers and students that foster academic and social competence (relationships). By focusing on these key components, effective educational systems close both the expectation gap and the achievement gap.

This framework is designed to support the necessary changes in school structure and classroom practice required to successfully implement the recommendations outlined in The High School Redesign Steering Committee's policy report NJ STEPS: Redesigning Education in New Jersey for the 21st Century. The report includes the specific types of support required for students, parents, teachers, administrators, guidance counselors, and the community in what is envisioned as a grades 6-12 initiative.

The specific needs of middle-level learners and teachers are unique. As such, the type of support provided will be different, albeit no less important than that needed in high schools.

The New Jersey Professional Development Partnership, that includes representation from the New Jersey Association for Supervision and Curriculum Development, New Jersey Education Association, the New Jersey Principals and Supervisors Association/Foundation for Educational Administration, The Center for Innovative Education at Kean University, and the New Jersey Department of Education, will develop specific programs aligned with the identified support strands. They will align their present and

long-range professional development offerings to the areas of focus listed below in order to support successful implementation of secondary education reform. The support will take the form of specific online and face-to-face offerings, public outreach campaigns, and development of resources and materials to promote these areas of focus.

Rigor

- 21st Century Teaching and Learning
 - o Content specific pedagogy
 - o 21st century knowledge and skills
 - o Value-added technology integration
 - o P-16 alignment
 - o Awareness of graduation requirements
 - o Raising expectations for every student
- Assessment
 - o EOC assessments
 - o Local benchmark assessments – predict student performance/monitor progress
 - o Vertical and horizontal alignment of local assessments
 - o Program evaluation
 - o Data-driven planning and decisions
- Data-Driven Planning and Decisions
 - o Use of NJ SMART and other data resources
 - o Program evaluation
 - o Differentiated instruction based on data – Formative Assessments
- Having and communicating high expectations to all students

Relevance

- Flexible Opportunities for Students
 - o Enhance “option” 2
 - o Explore proficiency-based systems
 - o Develop individualized six-year education plans based on student interests and educational progress to determine course selections and related out of school experiences
 - o What is required to be successful after high school?
 - o Make learning irresistible

Relationships

- Know Your Students
 - o Differentiate instruction in the secondary level classroom
 - o Cultural sensitivity –honor all perspectives
 - o Personalize learning opportunities
 - o Dropout prevention
 - o Create emotionally safe learning environments
 - o Civic engagement

APPENDIX E:

STEERING COMMITTEE OUTREACH

Throughout the 2006-2007 school year, the Steering Committee sought information on the impact that their recommendations would have on special education, career and technical education, under-resourced schools, availability and capacity of teachers, and middle school preparation. In addition, the committee reviewed national data and solicited feedback from educators and community members.

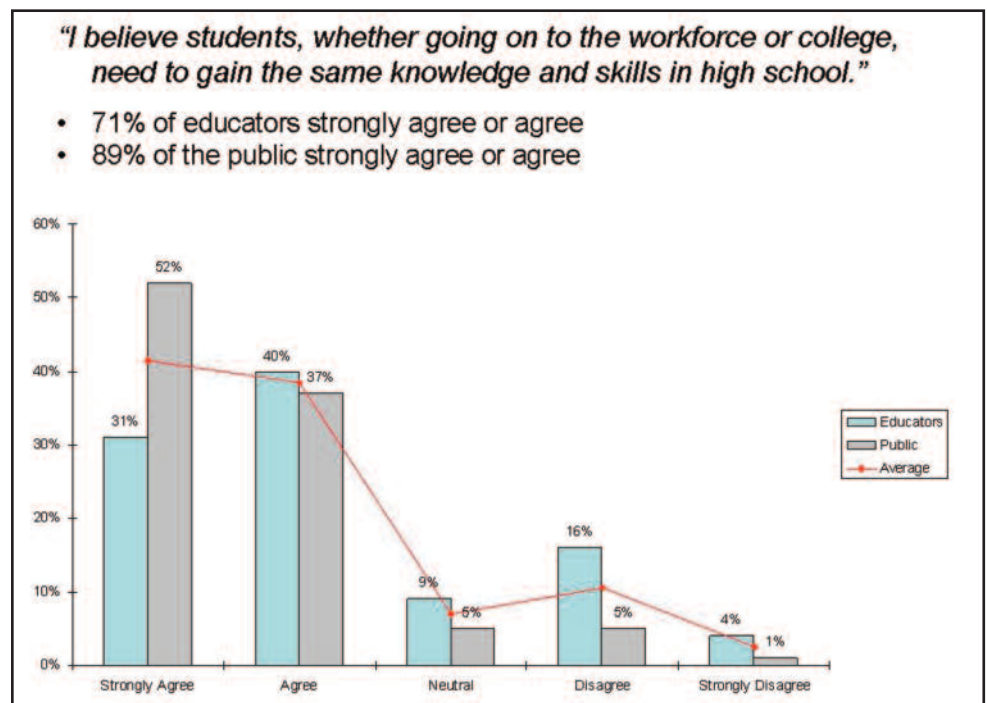
As a central part of its outreach efforts, the Steering Committee conducted a series of meetings for educators and the public. A total of 10 meetings were held, drawing over 1,000 participants, in geographically and socio-economically diverse locations throughout the state.

Steering Committee Educator and Public Convenings

Five of these meetings were designed specifically for educators, and five were designed as open public forums. At each of the meetings, participants were informed of the work of the High School Redesign Steering Committee regarding improving high school education in the state.

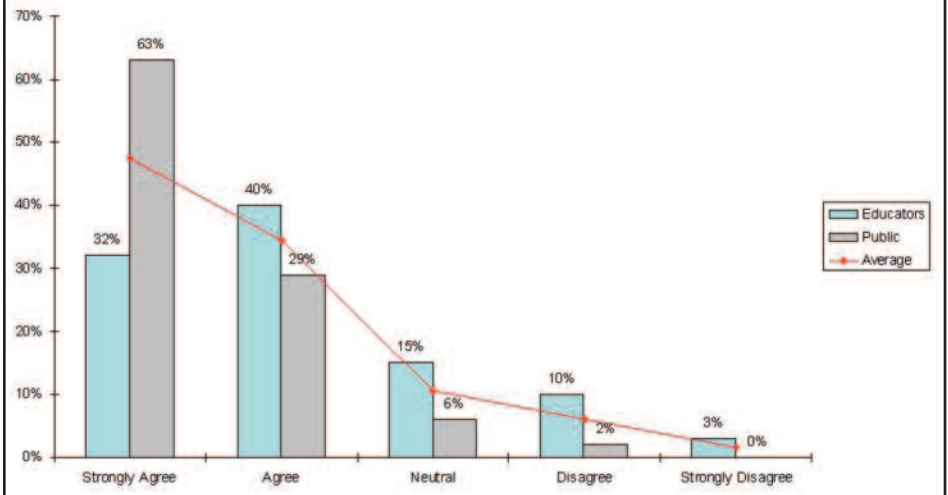
- October 6, 2006, Rowan University, Glassboro, NJ
- October 10, 2006, Stockton College, Pomona, NJ
- October 12, 2006, Montclair State College, Montclair, NJ
- October 16, 2006, The College of New Jersey, Ewing, NJ
- October 18, 2006, County College of Morris, Randolph, NJ
- January 23, 2007, East Brunswick High School, East Brunswick, NJ
- February 8, 2007, Washington Township Middle School, Sewell, NJ
- February 22, 2007, Long Branch Middle School, Long Branch, NJ
- March 6, 2007, Jose Marti Middle School, Union City Public Schools, Union City, NJ
- May 9, 2007, Columbia High School, Maplewood, NJ

Agreement with the vision described by the Steering Committee was strong, both among educators and the general public.



"I would support changing New Jersey graduation requirements to specify a sequence of rigorous courses such as algebra I, algebra II, and geometry to earn a high school diploma."

- 72% of educators strongly agree or agree
- 92% of the public strongly agree or agree



New Jersey High School Redesign Steering Committee Feedback from Educator and Public Convenings: October 2006-May 2007

I feel more informed about high school reform after today's presentation.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Educators	18%	49%	19%	12%	2%
Public	40%	46%	10%	1%	3%
Average	29.0%	47.5%	14.5%	6.5%	2.5%

I believe today's presentation made a strong case for reforming New Jersey high schools.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Educators	20%	43%	20%	14%	3%
Public	41%	45%	10%	1%	3%
Average	30.5%	44.0%	15.0%	7.5%	3.0%

I believe students, whether going on to the workforce or college, need to gain the same knowledge and skills in high school.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Educators	31%	40%	9%	16%	4%
Public	52%	37%	5%	5%	1%
Average	41.5%	38.5%	7.0%	10.5%	2.5%

I would support changing New Jersey graduation requirements to specify a sequence of rigorous courses such as Algebra I, Algebra II, and Geometry to earn a high school diploma.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Educators	32%	40%	15%	10%	3%
Public	63%	29%	6%	2%	0%
Average	47.5%	34.5%	10.5%	6.0%	1.5%

Relevance of the topic and materials

	Excellent	Good	Average	Fair	Poor
Educators	30%	49%	16%	4%	1%
Public	48%	46%	2%	0%	4%
Average	39.0%	47.5%	9.0%	2.0%	2.5%

The value of the information presented

	Excellent	Good	Average	Fair	Poor
Educators	22%	46%	21%	9%	2%
Public	48%	44%	5%	0%	3%
Average	35.0%	45.0%	13.0%	4.5%	2.5%

The overall experience at this session

	Excellent	Good	Average	Fair	Poor
Educators	17%	44%	25%	10%	4%
Public	44%	50%	1%	2%	3%
Average	30.5%	47.0%	13.0%	6.0%	3.5%

Focus Group Meetings

- Special Education Focus Group: May 30, 2007
- Career and Technical Education Focus Group: May 30, 2007
- Abbott Secondary Education Initiative Focus Group: August 7, 2007

The next step in the data gathering process was to solicit ideas from those who work in or with New Jersey's high schools to help the Steering Committee think through the specific ramifications, challenges, and rewards of implementing enhanced high school graduation requirements. This Advisory Committee was formed with participation from a diverse group of education practitioners within the state.

Through a series of focus groups, the Steering Committee also gave special consideration to the unique challenges and concerns faced by special education students, limited English proficient students, career and technical education students, and students in the state's urban school districts. Both the Advisory Committee and focus groups accepted the need to increase the rigor in our state's high schools.

APPENDIX F:

2005

HIGH SCHOOL

GRADUATION

SURVEY

During the 2005-2006 school year, the New Jersey Department of Education mailed a survey to all of New Jersey's high schools, including charter schools, career and technical education schools, adult high schools/evening programs, and comprehensive high schools to examine the high school graduation requirements in place for the Class of 2005 in the areas of mathematics, science, English/language arts, and social studies. The survey had an initial response rate of 66 percent. Follow up with non-responding high schools was carried out through the county superintendents, and additional time was given to complete the survey. All schools were required to submit a signed verification by the principal or superintendent assuring that the information provided was accurate.

Survey Instrument

County code
County name
District code
District name
School code
School name

First name
Last name
Title of person completing form
Phone number plus extension
Phone number extension
E-mail of person completing form

Does your high school implement any of the following high school reform initiatives? Check all that apply

- ☐ High Schools That Work
- ☐ First Things First
- ☐ Learn More, Do More, Earn More
- ☐ International Baccalaureate
- ☐ Early College High School
- ☐ Theme-based Schools
- ☐ Career Academies
- ☐ Other

If other please explain (100 words or less)

What percentage of the 2005 graduating class took one or more Advanced Placement Courses?

Has the "NAME OF DISTRICT" board of education adopted policy that allows the use of Option Two to fulfill high school graduation requirements? Y/N?

- ☐ no policy - a
- ☐ no policy - b
- ☐ no policy - c
- ☐ no policy - d
- ☐ no policy - e
- ☐ no policy - f
- ☐ other

How many credits in mathematics does your school require for all students?

Which mathematics courses are required for all students?

- ☐ Algebra I
- ☐ Algebra II
- ☐ Geometry
- ☐ Statistics
- ☐ Pre-calculus
- ☐ Calculus
- ☐ Other

If other, please explain

What percentage of students graduating in June 2005 completed Algebra I?

What percentage of students graduating in June 2005 completed Algebra I and geometry?

What percentage of students graduating in June 2005 completed Algebra I, geometry and Algebra II?

What percentage of students graduating in June 2005 completed mathematics courses above Algebra II (e.g. pre-calculus, probability and statistics, calculus)?

How many credits in science does your school require for all students?

What science courses are required for all students?

- ☐ Earth science
- ☐ Biology
- ☐ Chemistry
- ☐ Physics
- ☐ Physical Science
- ☐ Space Science/Astronomy
- ☐ Other

If other, please explain (50 words or less)

What percentage of students graduating in June 2005 completed biology?

What percentage of students graduating in June 2005 completed biology and chemistry?

What percentage of students graduating in June 2005 completed biology, chemistry and physics?

How many credits in social studies does your school require for all students?

What social studies courses are required for all students?

- ☐ United States History I (concludes the Civil War)
- ☐ United States History II (begins at the Reconstruction)
- ☐ World History
- ☐ World Cultures
- ☐ Economics
- ☐ Geography
- ☐ Civics/US Government
- ☐ Other

If other, please explain (50 words or less)

How many credits in English/language arts does your school require for all students?

9th Grade

- ☐ American Literature
- ☐ British Literature
- ☐ Contemporary Literature
- ☐ Writing/Grammar and Structure
- ☐ Creative Writing
- ☐ Public Speaking
- ☐ Media Studies
- ☐ Journalism
- ☐ AP Language and Composition - BLANK FOR 9TH GRADE
- ☐ Other

If other please explain (100 words or less)

10th Grade

- ☐ American Literature
- ☐ British Literature
- ☐ Contemporary Literature
- ☐ Writing/Grammar and Structure
- ☐ Creative Writing
- ☐ Public Speaking
- ☐ Media Studies
- ☐ Journalism
- ☐ AP Language and Composition - BLANK FOR 10TH GRADE
- ☐ Other

If other please explain (100 words or less)

11th Grade

- ☐ American Literature
- ☐ British Literature
- ☐ Contemporary Literature
- ☐ Writing/Grammar and Structure
- ☐ Creative Writing
- ☐ Public Speaking
- ☐ Media Studies
- ☐ Journalism
- ☐ AP Language and Composition
- ☐ Other

If other please explain (100 words or less)

12th Grade

- ☐ American Literature
- ☐ British Literature
- ☐ Contemporary Literature
- ☐ Writing/Grammar and Structure
- ☐ Creative Writing
- ☐ Public Speaking
- ☐ Media Studies
- ☐ Journalism
- ☐ AP Language and Composition
- ☐ Other

If other please explain (100 words or less)

APPENDIX G:

GLOSSARY

OF

TERMS

Achieve, Inc: Is a national organization created by the nation's governors and business leaders to help states raise academic standards and achievement so that all students graduate ready for college, work, and citizenship. Achieve, in consultation with colleges, universities, and high-performance workplaces across the country, identified what students need to know and be able to do to be successful in the 21st century, and created the ADP Network benchmarks based on their findings.

Abbott Districts: Refers to each of the following 28 urban school districts that were litigants in *Raymond Abbott v. Fred G. Burke* decided by the New Jersey Supreme Court on June 5, 1990 as follows: Asbury Park City, Bridgeton City, Burlington City, Camden City, East Orange City, Elizabeth City, Garfield City, Gloucester City, Harrison Town, Hoboken City, Irvington Township, Jersey City, Keansburg Borough, Long Branch City, Millville City, New Brunswick City, Newark City, City of Orange Township, Passaic City, Paterson City, Pemberton Township, Perth Amboy City, Phillipsburg Town, Pleasantville City, Trenton City, Union City, Vineland City, and West New York Town. The following school districts have been added to the original 28 Abbott school districts pursuant to statute: Neptune Township, Plainfield and Salem City increasing the number to 31 school districts.

American Diploma Project Network (ADP): In 2004, the American Diploma Project (ADP), a partnership of Achieve, The Education Trust, and the Thomas B. Fordham Foundation, published detailed English and mathematics benchmarks describing the knowledge and skills that American high school graduates need to succeed in college or the workplace. Today, 32 states belong to the network that was formed to significantly raise the rigor of high school standards, assessments, and curriculum to better align them with the demands of postsecondary education and work.

Career and Technical Education (CTE): also known as vocational education. According to federal legislation, career and technical education is evolving from its original and sole focus on preparing students for work immediately following high school. Today's career and technical education program increasingly incorporate rigorous and challenging academic content standards and provide a non-duplicative sequence of courses leading to an industry-recognized credential or certificate, or an associate or baccalaureate degree.

Cohort Graduation Rate: Means following the progress of each ninth grader as he or she moves through high school. This method of calculation will provide New Jersey with an actual count of how many students graduate with a diploma in four years.

Core Curriculum Content Standards (CCCS): Were first adopted by the State Board of Education in 1996 and revised and readopted by the Board in October 2004. The standards are reviewed and revised every five years. They articulate the common expectations for student achievement throughout a student's 13 years of public education and include the following nine areas: Standard 1—Visual and Performing Arts, Standard 2—Comprehensive Health and Physical Education, Standard 3—Language Arts Literacy, Standard 4—Mathematics, Standard 5—Science, Standard 6—Social Studies, Standard 7—World Languages, Standard 8—Technological Literacy, and Standard 9—Career Education and Consumer, Family, and Life Skills.

End of Course Assessment: Is a test given at the conclusion of a course of study, such as biology, that measures knowledge and skill attainment in a specific content area.

High School Proficiency Assessment (HSPA): replaced the High School Proficiency Test (HSPT) in spring 2000 and is used to determine student achievement of the knowledge and skills in the NJ CCCS for language arts literacy and math. Passing all sections of the test is a requirement for receiving a high school diploma.

Individualized Education Plan (IEP): Is a written plan developed at a meeting that includes appropriate school staff and the parent(s). It determines the special education program for a student with disabilities through individually designed instructional activities constructed to meet the goals and objectives established for the student. It establishes the rationale for the student's placement and documents the provision of a free, appropriate public education.

National Assessment for Educational Progress (NAEP): Measures educational achievement of American students in a number of subjects and the changes in achievement over time. The program also provides scores for subpopulations defined by demographic characteristics and by specific background characteristics and experiences.

National Governor's Association: Is the collective voice of the nation's governors and one of Washington, D.C.'s, most respected public policy organizations. The Association promotes visionary state leadership, shares best practices, and speaks with a unified voice on national policy.

New Jersey Quality Single Accountability Continuum (NJQSAC): is the Department of Education's new monitoring and evaluation system for public school districts. This new system shifts the monitoring and evaluation focus from compliance to assistance, capacity-building and improvement. The system will focus on monitoring and evaluating school districts in five key components which, based on research, have been identified to be key factors in effective school districts. These components are: instruction and programs; personnel; fiscal management; operations; and governance.

New Jersey Standards Measurement and Resource for Teaching (NJ SMART): is a student registration system being developed by the New Jersey Department of Education to collect student-level data.

NJ STEPS: are the recommended high school standards and graduation requirements set forth by the New Jersey High School Redesign Steering Committee in their 2008 policy paper.

No Child Left Behind (NCLB): The No Child Left Behind Act of 2001 was signed into law on January 8, 2002. It reauthorizes the Elementary and Secondary Education Act of 1965 (ESEA), the main federal law regarding K-12 education. The four main pillars of NCLB are: accountability; flexibility and local control; enhanced parental choice and a focus on what works in the classroom. NCLB requires state governments and educational systems to help low-achieving students in high-poverty schools meet the same academic performance standards that apply to all students.

P-16 Council: Using models developed by other successful states, the Steering Committee recommends that state leadership should collaborate to create a P-16 Council. The phrase P-16 represents the focus on a seamless, integrated educational system from pre-school through four years of college. According to the Education Commission of the States, 30 states are currently engaged in some kind of P-16 activity.

Partnership for 21st Century Skills: Is an advocacy organization focused on infusing 21st century skills into education. The Partnership encourages schools, districts and states to advocate for the infusion of 21st century skills into education and provides tools and resources to help facilitate and drive change.

Perkins Act: The Carl D. Perkins Career and Technical Education Improvement Act of 2006 provides federal funding for secondary, postsecondary and adult career technical education programs. This program also provides grants to states for the development of multiyear Tech Prep programs leading to a two-year associate's degree or a two-year certificate.

School Funding Formula: On December 12, 2007, Governor Jon S. Corzine and Education Commissioner Lucille E. Davy announced a new school funding formula: "A Formula for Success: All Children, All Communities." Approximately \$7.8 billion will be distributed to K-12 education for the 2009 fiscal year, an increase of \$532.8 million. All school districts will receive a state aid increase of at least 2 percent during the first year, and no school districts will see a decrease in state aid during the first three years of the program. The funding formula was adopted by the NJ Legislature on January 7, 2008 and signed into law on January 13, 2008.

APPENDIX H:

BIBLIOGRAPHY

1. National Institute for early Education Research (NIEER), The State of Preschool 2006: State Preschool Yearbook. March 2007.
<http://nieer.org/yearbook/>
2. U.S. Department of Education, National Center for Education Statistics, The Condition of Education 2007 (NCES 2007-064). Washington, DC: U.S. Government Printing Office.
3. The College Board, Advanced Placement Report to the Nation 2006.
http://www.collegeboard.com/student/testing/ap/exgrd_sum/2006.html
4. The College Board, Advanced Placement Report to the Nation 2006.
http://www.collegeboard.com/student/testing/ap/exgrd_sum/2006.html
5. The National Board of Education Testing and Public Policy. The Education Pipeline in the United States 1970-2000. January, 2004.
<http://www.bc.edu/research/nbetpp/statements/nbr3.pdf>
6. Carnevale, Anthony P. and Donna M. Desrochers, Standards for What? The Economic Roots of K-16 Reform, Educational Testing Service, 2003.
7. Greene, Jay and Marcus Winters, Public High School Graduation and College-Readiness Rates: 1991-2002, The Manhattan Institute. http://www.manhattan-institute.org/pdf/ewp_08.pdf
8. Achieve, Inc. Closing the Expectations Gap 2006: An Annual 50-State Progress Report on the Alignment of High School Policies with the Demands of College and Work. (February 2006) Data gathered from the National Center for Public Policy and Higher Education, Policy Alert, April 2004.
<http://www.achieve.org/node/546>
9. Achieve, Inc. Closing the Expectations Gap 2006: An Annual 50-State Progress Report on the Alignment of High School Policies with the Demands of College and Work. (February 2006) Data gathered from the National Center for Public Policy and Higher Education, Policy Alert, April 2004.
<http://www.achieve.org/node/546>
10. National Center for Education Statistics, The Condition of Education 2004.
11. New Jersey Chamber of Commerce
12. Carnevale, Anthony P. and Donna M. Desrochers, Standards for What? The Economic Roots of K-16 Reform, Educational Testing Service, 2003.
13. National Center for Public Policy and Higher Education, Policy Alert, April 2004. (Data are estimate of pipeline progress rather than an actual cohort.)
14. Achieve Web site at <http://www.achieve.org/node/317>
15. Adelman, Clifford, The Toolbox Revisited: Paths to Degree Completion from High School Through College, U.S. Department of Education, 2006.
16. Jerald, Craig D., Identifying Potential Dropouts: Key Lessons for Building an Early Warning Data System – A Dual Agenda of High Standards and High Graduation Rates. Achieve, Inc., June 2006.
17. Barton, Paul E., One Third of a Nation: Rising Dropout Rates and Declining Opportunities. Educational Testing Service, February 2005.
<http://www.ets.org/Media/Research/pdf/PICONETHIRD.pdf>

18. Carnevale, Anthony P. and Donna M. Desrochers, Standards for What? The Economic Roots of K-16 Reform, Educational Testing Service, 2003.
19. Achieve, Inc., Ready or Not: Creating a High School Diploma that Counts, February 2004. http://www.achieve.org/files/ADPreport_7.pdf
20. Achieve, Inc., Ready or Not: Creating a High School Diploma that Counts, February 2004. http://www.achieve.org/files/ADPreport_7.pdf
21. Carnevale, Anthony P. and Donna M. Desrochers, Standards for What? The Economic Roots of K-16 Reform, Educational Testing Service, 2003.
22. Baum, Sandy and Kathleen Payea, Education Pays 2004: The Benefits of Higher Education for Individuals and Society, The College Board, 2005. http://www.collegeboard.com/prod_downloads/press/cost04/EducationPays2004.pdf
23. Greene, Jay and Marcus Winters, Public High School Graduation and College-Readiness Rates: 1991-2002, The Manhattan Institute. http://www.manhattan-institute.org/pdf/ewp_08.pdf
24. National Center for Education Statistics, The Condition of Education 2004.
25. National Center for Public Policy and Higher Education, Policy Alert, April 2004.
26. Organization for Economic Cooperation and Development, Education at a Glance 2004, 2004.
27. Peter D. Hart Research Associates/Public Opinion Strategies, Rising to the Challenge: Are High School Graduates Prepared for College and Work? Prepared for Achieve, Inc., 2005.
28. New Jersey Chamber of Commerce
29. Peter D. Hart Research Associates/Public Opinion Strategies, Rising to the Challenge: Are High School Graduates Prepared for College and Work? Prepared for Achieve, Inc., 2005.
30. National Center for Public Policy and Higher Education, Policy Alert, April 2004. (Data are estimate of pipeline progress rather than an actual cohort.)
31. New Jersey Commission on Higher Education
32. New Jersey Commission on Higher Education
33. New Jersey Commission on Higher Education
34. New Jersey Commission on Higher Education
35. New Jersey Commission on Higher Education
36. Achieve, Inc., Closing the Expectations Gap 2008: An Annual 50 State Progress Report on the Alignment of High School Policies with the Demands of College and Work, February 2008 <http://www.achieve.org/files/50-state-08-Final 02-25-08.pdf>
37. U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), National Public Education Financial Survey 2003-04.

ACKNOWLEDGEMENTS

The following individuals were instrumental in providing information for this report:

New Jersey High School Redesign Steering Committee Co-Chairs:

Jon S. Corzine

Governor
The State of New Jersey

Arthur Ryan

Chairman
Prudential

Dr. Susan Cole

President
Montclair State University

New Jersey High School Redesign Steering Committee Members:

JoAnn Bartoletti

Executive Director
New Jersey Principals and Supervisors Association

Dr. Ada Beth Cutler

Dean, College of Education and Human Services
Montclair State University

Lucille Davy

Commissioner
State of New Jersey Department of Education

Dr. Jay Doolan

Assistant Commissioner
State of New Jersey Department of Education

Barry Ersek, Ed.D

Co-Director of Professional Development
New Jersey Association of School Administrators

Dana Egreczky

Vice President, Workforce Development
New Jersey Chamber of Commerce

Dr. Kenneth Ender

President
Cumberland County College

Dr. Barry J. Galasso

Former Executive Director
New Jersey Association of School Administrators

Edwina Lee

Retired Executive Director
New Jersey School Boards Association

Mary O'Malley

Executive Director
New Jersey United for Higher School Standards
Vice President, Local Initiatives,
Prudential

Jane Oates

Executive Director
New Jersey Commission on Higher Education

Joyce Powell

President
New Jersey Education Association

New Jersey High School Redesign Steering Committee Communications Team:

Nacema Blake

New Jersey United for Higher School Standards
Prudential

Stacy Harris

Success Communications Group

Michael Schneider

Success Communications Group

New Jersey High School Redesign Advisory Committee Members:

The New Jersey High School Redesign Advisory Committee included a diverse group of educators and community leaders convened to provide their professional expertise and feedback on the Steering Committee's overall recommendations and specifically the draft graduation requirements and assessments.

Mary Bennett
Project GRAD Newark

Bette DaGiau
Teaneck Public Schools

Dr. Mary DeHart
Sussex County Community College

Trudy Doyle
Hopatcong Public Schools

Christopher Emigholz
New Jersey Business and Industry Association

Dr. Barry Ersek
New Jersey Association of School Administrators

Dr. Lawrence Feinsod
Cranford Public Schools

Frank Ferlazzo
Roselle Park Board of Education

Dr. Robert Goodman
Bergen County Technical High School-Teterboro

Anthony Gugliotta
East Brunswick High School

John Iacovelli
The Richard Stockton College of New Jersey

S. Lucille Jones
Mercer County Technical Schools

Stan Karp
Education Law Center

Dr. Cathy Mack
Cumberland County College

Daniel Moran
East Brunswick High School

Robert Murphy
East Brunswick High School

Sharon Nemeth
Mercer County Technical Schools

William Robbins
Montgomery Middle School-Upper Campus

Dr. Kimberly Schneider
Mercer County Technical Schools

Dr. Richard Shain
Millville Public Schools

Special Education Focus Group Participants:

The Special Education Focus Group included educators with professional expertise in special education. They provided feedback on how the draft graduation requirements and assessment would affect special education teachers and students. They also provided overall feedback on the Steering Committee's draft recommendations.

Linda Calandra
Clearview Regional High School

Dr. Amy Fratz
New Jersey Education Association

James Gavitt
Middle Township High School

George Hickman
Cumberland County Technical Education Center

Timothy McGrail
Wharton Borough Public Schools

Heidi Olson
Hopewell Valley Regional Schools

Marie Blistan
Washington Township Public School District

Career and Technical Education Focus Group Participants

The Career and Technical Education (CTE) Focus Group included educators with professional expertise in Career and Technical Education. They provided insight on how the draft graduation requirements and assessments would affect students enrolled in full-time and shared-time CTE programs. They also provided valuable feedback on the Steering Committee's overall draft recommendations.

Marguerite Beardsley
New Jersey Commission on Higher Education

Dr. Thomas Bistocchi
Union County Vocational-Technical Schools

Craig Coleman
Ocean County Vocational Technical School

Frank Gargiulo
Hudson County Schools of Technology

Dr. Robert Goodman
Bergen County Technical High School—Teterboro

Dr. Philip Guenther
Atlantic County Institute of Technology

S. Lucille Jones
Mercer County Technical Schools

Dr. Brian McAndrew
Monmouth County Vocational School District

Judy Savage
New Jersey Council of Vocational-Technical Schools

Dr. Kimberly Schneider
Mercer County Technical Schools

Andrea Sheridan
Bergen County Technical High School—Teterboro

Abbott Focus Group Participants

The Abbott Focus Group included members of the Abbott Secondary Education Initiative. These educators provided information about their progress in implementing high school redesign strategies in the Abbott Districts. They provided feedback on the draft graduation requirements and assessments and the impact they would have on students and teachers in these districts. They also provided their feedback on the Steering Committee's overall draft recommendations.

Marie Barry
State of New Jersey Department of Education

Mary Bennett
Project GRAD Newark

Eileen Burch
State of New Jersey Department of Education

Michael Carrigan
Abbott Secondary Initiative

Dr. Michelle Fine
City University of New York

Stan Karp
Education Law Center

Dr. Joan Kozlovsky
Southern Regional Education Board

Mark McGrath
Lawrence High School

Dr. Willa Spicer
State of New Jersey Department of Education

Dr. Sandra Strothers
State of New Jersey Department of Education

Dr. Jerry Woehr
New Jersey Association of School Administrators



**The New Jersey High School
Redesign Steering Committee**